THE STRATEGIC PROCESSES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT: A RETAIL COMMUNITY PHARMACY PERSPECTIVE

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THE STRATEGIC PROCESSES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT: A RETAIL COMMUNITY PHARMACY PERSPECTIVE

by

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(i) DEDICATION

FOR THE GENERATION BEFORE ME,
MY MOTHER,
SARATHAMBAL NAIDOO
AND
THE GENERATION AFTER ME,
MY SON,
SHIVESH NAIDOO

“YOU ARE THE WIND BENEATH MY WINGS”

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(iii) ABSTRACT AND EXECUTIVE SUMMARY

A: ABSTRACT

Introduction:

In South Africa, the small business sector has been identified as a sector that is not performing optimally. In a turbulent environment, this type of small business profile is magnified. Therefore, it is important to examine mechanisms through which the performance of this sector can be enhanced. Dynamic capabilities have emerged as a strategic tool of the highest order in terms of firm management and strengthening these capabilities is a key concern for firms that operate in a turbulent environment. Dynamic capabilities are described as the processes required to reconfigure existing resources into new functional competencies. Therefore, this study investigated the strategic processes of small businesses and developed a new strategic model and theory to illustrate and elucidate intervention mechanisms and strategies to strengthen the dynamic capabilities of these small businesses.

Methodology:

The retail community pharmacy sector was chosen as a model sector for this study since it is a sector that comprises mainly of small businesses and it is currently experiencing environmental turbulence. The methodology followed an initial exploratory, qualitative approach followed by a formal, empirical, quantitative approach. The research questionnaire was derived after ensuring that content validity, criterion related validity, construct validity and reliability criteria were met. This questionnaire was administered to a sample of 477 out of a population of 2549 small businesses in the retail community pharmacy sector, using an unrestricted, simple, random, probability sampling approach. As a consequence of having received 130 completed questionnaires, the results obtained in this study were expressed at the 95% confidence level with a confidence interval of 0.08.

Results and Discussion:

From a gap analysis of the level of importance of dynamic capabilities and their extent of implementation, seven dynamic capabilities whose implementation can be enhanced by an alteration of the management importance perception of them, were extracted. These capabilities revolve around staff reward, well-being, empowerment and education and training, as well as the abilities of the small

business leadership to sense the environment and opportunities while being sensitive to stakeholder needs. Through a consolidation of the results of the gap analysis, a model for the initiation and the sustaining of innovative resource reconfigurations was developed.

Conclusion:

For the management practice setting, this study's findings suggest that the dynamic capabilities of small firms operating in a turbulent environment can be enhanced and strengthened by the employment of the model developed by this study. From a management education perspective, this study's findings also suggest that the employment of specific and focussed management education that revolves around the seven identified processes will enable not only the initiating phase of the proposed model but will also provide a multiplier effect in the model since management capability is also part of the general resource base of the firm. This study thus proposes the use of these management practice and educational approaches to strengthen and enhance the dynamic capabilities of small businesses operating in a turbulent environment.

Keywords: strategic processes**,** dynamic capabilities, small businesses, turbulent environment, management capability.

B: EXECUTIVE SUMMARY

CHAPTER 1: OVERVIEW

The aims of this chapter were to introduce the study, state the research problem, the research objectives and the research propositions, explain the study's use of the importance/implementation approach, demarcate and outline the scope of the study, define the research limitations, explain the research design and provide the chapter outline of the thesis.

This overview chapter commenced with an introduction to the study and an explanation of why the resource-based view needed to be extended to the dynamic capabilities view. The relevance of the dynamic capabilities view to optimal business performance in a turbulent environment was also explained. This chapter also highlighted the study's differentiation of dynamic capabilities into reconfiguration enabling processes and reconfiguration processes in order to obtain clarity about the content, domain, conceptualisation and operationalisation of dynamic capabilities.

In explaining the context of the study, viz. small businesses operating in a turbulent environment, the lack of optimal performance of the small business sector and its failure to meet expectations was emphasised.

From this business and management problem emerged the research problem viz. "How to strengthen the dynamic capabilities of small businesses operating in a turbulent environment". From this research problem, emerged the purpose of the study, and the research objectives of the study.

This chapter also explained the study's use of its importance/implementation approach and emphasised how the use of this approach would enable the quantitative description of scarce resource allocation to strategic processes or dynamic capabilities. The utility of this approach in the creation of a theoretical model for the strengthening of the strategic processes in small businesses operating in a turbulent environment was also emphasised.

The study also demarcated clearly, through the outlining of the scope of the study, aspects related to the study that would not be dealt with by the study. These aspects were linked to the recommendations for future research in Chapter 6. The limitations of the study were also outlined, and linked to the recommendations in Chapter 6.

This chapter also described the research design, in nine stages, and highlighted the type of study being carried out viz. an initial qualitative, exploratory approach, followed by a quantitative, descriptive approach and then a quantitative, explanatory or inferential approach.

The chapter also provided the chapter outline of the thesis

CHAPTER 2: THE LITERATURE REVIEW

The aims of this chapter were to review the literature review to provide a theoretical background to the study and motivate for and justify the propositions developed.

This literature review chapter commenced with the definition and characterisation of small businesses. Turbulent environment were defined and strategic approaches to these turbulent environments were then explored. The literature indicated the inadequacy of traditional strategic processes in turbulent environments and pointed to the need for new strategic processes that would enable the continuous adaptation, innovation and reconfiguration of resources to create value-adding strategies and competitive advantage; a perspective consistent with the dynamic capabilities view.

In general, the literature review revealed a paucity of literature and research on the strategic processes of small businesses operating in a turbulent environment. Nonetheless, since the literature on dynamic capabilities indicated that there are “best practices“ in the execution of dynamic capabilities, “best practices” for excellence in small business excellence were identified in the Malcolm Baldrige Quality Award Criteria.

To obtain clarity about what dynamic capabilities really are, the literature was searched to extract relevant and cohesive themes that would enable the conceptual separation of dynamic capabilities into reconfiguration enabling processes and reconfiguration processes. The literature identified the processes of “patching” and “co-evolving” as reconfiguration processes. Four reconfiguration drivers were also identified viz.: environment and opportunity sensing, knowledge acquisition and learning, co-ordination and regulation and alignment and integration. These reconfiguration drivers were found to be embodied in the “best practices “ of the Malcolm Baldrige National Quality Award Criteria.

Using the identified reconfiguration enabling processes, reconfiguration processes and themes that emerged from the personal interviews, this chapter synthesised a set of strategic processes for small businesses operating in a turbulent environment. This set of strategic processes was used as the basis for the questionnaire to be distributed to the respondents of this study.

The literature was also reviewed to provide support for the propositions that were generated, using the methodology described in Chapter 3.

A general synthesis of the literature also revealed the importance of the study in the practice environment for the small business and for small business theory and the general body of management theory.

The environmental turbulence created in the retail community pharmacy sector by the new pricing structures, single exit prices, the opening of ownership of pharmacies to persons other than pharmacists, the creation of designated service providers by service payers and the issue of dispensing licences to healthcare professionals who are not pharmacists, provided justification for the use of this sector to model the strategic processes of small businesses operating in a turbulent environment. The importance of the study to this sector was also explained, in terms of increasing the knowledge of how resources are reconfigured in this sector, in the light of this sector's duality viz. its focus on professionalism versus its focus on mercantilism.

CHAPTER 3: RESEARCH METHODOLOGY

This aims of this chapter were to describe the research stages and the elements of the research process, focusing on the primary data collection methodology, both qualitative and quantitative and the method that was used in the process of theory building and proposition development, as well as explaining how the instrument was designed, the nature of measurement, the soundness of measurement, the pilot study, the population and sampling methods, the data preparation and the data analysis methods.

This research methodology chapter commenced with a clear layout of the nine research stages, from the research problem formulation stage to the data analysis stage. The chapter then described the elements of the research process. The degree of problem crystallisation was shown by the description of the research as

an initial qualitative, exploratory study, followed by a quantitative descriptive analysis and finally by a quantitative, formal, empirical study method. The researcher's control of variables was illustrated by an explanation of how the researcher had no control of the variables in the sense of being able to manipulate them. The time-dimension of the study as was indicated by the cross-sectional nature of the study, which showed that the study represented a moment in time.

The use of Dubin's theory building and proposition development methodology was clearly explained. Each proposition that was developed was motivated for comprehensively in Chapter 2.

The questionnaire design process indicated how the themes that emerged from the personal interviews with six small business owners, all retail community pharmacists were incorporated into the draft questionnaire together with the relevant strategic processes extracted from the literature.

This chapter also indicated that prior to the pilot study, this draft questionnaire, was first evaluated by a panel of six experts, comprising, academics, small business owners and pharmacists, and that the questionnaire was refined according to the comments and suggestions, giving rise to the pilot questionnaire. The pilot questionnaire was then subjected to a pilot study that comprised of ten respondents, all small business owners who were retail community pharmacists.

This chapter described the nature of measurement used in the study as the Likert scaling method and explained its appropriateness of use in this type of study. The soundness of measurement in terms of validity and reliability parameters were also described in this chapter. The content validity criterion was satisfied by the evaluation of the draft questionnaire by the panel of experts. The criterion-related validity parameter was satisfied by the genesis of the questionnaire in a validated set of "best practices" from the Malcolm Baldrige National Quality Award Criteria. The construct validity was satisfied by the use of the factor analysis which refined the measuring instrument and confirmed that the factors actually measured the strategic processes of small businesses operating in a turbulent environment. The reliability criterion was satisfied by the high Cronbach Alpha values obtained indicating the consistency and homogeneity among the items in the questionnaire.

The section dealing with the pilot study chapter commenced with an explanation of the purpose of the pilot study and then a description of the pilot study participants, who were ten small business owners who were retail community pharmacists. The

chapter then detailed the analytical procedures that were carried to ensure the validity and reliability of the instrument, using the SPSS 11.5 statistical package.

The alpha coefficients that were obtained for the reliability analysis ranged from moderate to high in general showing a moderate to high internal consistency in the questionnaire. The factor analysis results that were obtained showed that a five factor solution showed the best interpretable factor pattern, which loaded out onto the factors staff, leadership, measurement, customers and networks and support systems.

The chapter then explained that a second factor analysis was conducted on the instrument after adjustment to the five factor solution, to ensure that the correct factor solution was used. The second factor analysis results showed that the factor, staff, loaded out onto a two factor solution, for knowledge, empowerment and motivation as well as reward. This chapter thus showed that a five factor solution showed the most interpretable factor patter, with the factor, staff being sub-divided into staff knowledge, empowerment and motivation and staff reward.

The chapter explained the limitations to the pilot study and concluded that the questionnaire had satisfactory reliability and validity for the study.

In dealing with the administration of the final questionnaire to the population under test, the chapter highlighted the relevant population of this study [retail community pharmacies that are small businesses], comprising of 2549 pharmacies. The chapter also indicated that at a confidence level of 95% and a confidence interval [expresses as a decimal] of 0.05, a sample size of 334 was required for this population. The sample was selected using an unrestricted, simple, random, probability sampling approach with the SPSS 11.5 statistical package. To account for a 30% non response rate, 477 questionnaires were distributed. However, only 134 questionnaires were returned. Of these four questionnaires were incomplete and were not included in the study. The study's new confidence interval [expressed as a decimal], with this reduced sample size was then calculated to be 0.08 at the 95% confidence level.

The chapter also indicated methods by which the data would be prepared for analysis by describing the editing, coding and entering of data procedures.

The methods of data analysis were also described in this chapter with reasons cited for the choice of descriptive and inferential statistics used in the study. The chapter indicated that the type of descriptive statistics that this study used were

the means and the standard deviations. The means were used because they measure the central tendency was used to determine the average response of respondents towards a test, while the standard deviations were used because they improve interpretability by removing the variance's square and expressing deviations in their original units.

Besides the Cronbach Alpha and factor analysis, the chapter indicated that t-tests were also used. Since this study revolved around the determination of the significance of the difference between two variables that were both provided by the same set of respondents, the use of a paired t-test thus provided the best test of statistical significance.

CHAPTER 4: QUANTITATIVE DATA ANALYSIS AND RESULTS

The aims of this chapter were to present and analyse the data.

This chapter commenced with reliability and validity testing on the data obtained from the final questionnaire, using the Cronbach Alpha values and factor analysis methods described in Chapter 3. This chapter then indicated that the factors loaded out onto a six factor solution, viz. staff-knowledge empowerment and motivation, staff-reward, leadership, measurement, customers and networks and support systems. The leadership factor loaded out onto two separate sub-factors, leadership - general and leadership – new. This chapter termed each factor, a process cluster. The reliability estimates for each process cluster ranged from moderate to high, indicating a moderate to high internal consistency in the final questionnaire.

The data analysis in this chapter was approached in a stepwise manner, with an initial general analysis of all process clusters and processes. This was followed by an analysis of the importance /implementation gap in process clusters and finally an analysis of the importance/implementation gap in all processes.

CHAPTER 5: DISCUSSION OF RESULTS

The aims of this chapter were to discuss the results obtained in Chapter 4

This chapter commenced with a quantitative description of the level of importance and extent of implementation of each process cluster and each individual process using a comparison of the means of the results obtained and through a trend analysis of these means. For the strategic process clusters, this chapter found that these small businesses considered measurement to be the most important strategic process cluster; while staff-reward was found to be the least important strategic process cluster. On the other hand networks and support systems was found to be the most implemented strategic process cluster with leadership-turbulence the least implemented process cluster.

For the individual processes, in terms of importance, this chapter found that processes 12, 18, 21 and 22 were the most important processes, while processes 10 and 32 were the least important processes. For the individual processes, in terms of implementation, this chapter found that processes 4, 5 and 6 were the most implemented processes, while process 14 was the least implemented process.

In the second step, this chapter analysed importance and implementation in general and found that there was a significant gap between level of importance and extent of implementation of the processes in general.

In the third step, this chapter analysed the importance and implementation of process clusters and found that staff-reward was the only process cluster with no significant gap between level of importance and extent of implementation, indicating that the extent of implementation, and by extension the resource allocation, to this process cluster could be influenced by a change in the importance perception, and by extension the management capabilities of small businesses operating in a turbulent environment.. This step also indicated that the other process clusters were dependant on a change in the general resource base of the small firm for any change in the extent of implementation of these process clusters.

In the fourth step, this chapter analysed the importance and implementation of all processes and found that processes 4, 6,7,8,10,29 and 30 showed no significant gap between level of importance and extent of implementation, indicating that the extent of implementation, and by extension the resource allocation to these

processes could be influenced by a change in the importance perception, and by extension the management capabilities of small businesses operating in a turbulent environment. This step also indicated that the other processes were dependant on a change in the general resource base of the small firm for any change in the extent of implementation of these processes.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The aims of this chapter were to present the major findings of this study, show how the research problem, the research purpose, the research objectives and the research propositions are satisfied and to make recommendations for future areas of research.

This chapter commenced with a linking of each element of the research purpose, research objectives to chapters and sections where they were addressed. Using the empirical results of the study, the research propositions were examined to indicate whether they were supported or not. This chapter also reported on a new strategic model and theory on the strategic processes of small businesses operating in a turbulent environment and presented a summary of the main research findings.

The main conclusion of the study was highlighted viz. by the employment of stepwise, rational, specific and targeted interventions and strategies that are designed to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment, the dynamic capabilities of these small firms can be strengthened and hence their performance in turbulent environments optimised.

Several recommendations for future research in this area were also made.

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(vi) DEFINITION OF KEY TERMS

SMALL BUSINESS

For the purposes of this research a businesses shall be defined as a business employing less than 50 workers assumed to be formally registered, clearly demarcated and paying taxes on a regular basis (Chapter 2)

DYNAMIC CAPABILITIES

This study defines dynamic capabilities as the strategic processes of a small business operating in a turbulent environment and they comprise of reconfiguration processes and reconfiguration enabling processes (Chapter 2).

RECONFIGURATION PROCESS

The reconfiguration process is the innovative redeployment of existing resources into a new set of functional competencies (Chapter 2).

RECONFIGURATION ENABLING PROCESS

These are enabling processes that underlie the ability to create new configurations (Chapter 2)

"BEST PRACTICE"

This study defines " best practice " processes as those processes that enable an organisation to be more effective and efficient in their strategic activities by ensuring a fast, co-ordinated execution of complex details, and which are well established constructs (Chapter 2).

RESOURCES

All the assets of the firm, technological, financial, managerial and organisational, that enables firms to operate in markets. They comprise more than tangible assets, and include the intangible assets such as the skills and knowledge of the workforce (Chapter 2).

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CHAPTER ONE

OVERVIEW

CHAPTER 1: OVERVIEW

1.1 CHAPTER SUMMARY

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In explaining the context of the study, viz. small businesses operating in a turbulent environment, the lack of optimal performance of the small business sector and its failure to meet expectations was emphasised.

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1.2 INTRODUCTION

The dynamic capability of a firm is rapidly emerging as a primary model of competitive advantage that is explicitly focused on conditions of environmental change (Eisenhardt and Martin, 2000: 1105); and as a strategic tool of the highest order in terms of firm management (Lopez,2005:661). Wu (2005) has stated that for firms facing a rapidly changing environment, the strengthening of their dynamic capabilities is a key concern. These dynamic capabilities have been defined as the firm's ability to innovatively reconfigure its resources (Wu, 2005).

The dynamic capabilities approach is a conceptual approach embedded in the context of the resource-based view. The resource-based view of the firm suggests that resources that are valuable, rare, unique and inimitable should lead to competitive advantage (Barney, 1991:99; Connor and Prahalad, 1996:477). In turbulent environments, this view is inadequate. Eisenhardt and Martin (2000:1105) have pointed out that the resource-based view mis-identifies the locus of long-term competitive advantage in dynamic markets, overemphasises the strategic logic of leverage and reaches a boundary condition in high-velocity markets. Thus the resource – based view has been extended to the dynamic capabilities view to accommodate the influence of turbulent environments (Makadok, 2001:487). However a limitation of the dynamic capabilities view is that there is a lack of clarity about the nature of dynamic capabilities (Winters, 2003:998).

Therefore, since this study views the strategic processes of small businesses operating in a turbulent environment as dynamic capabilities, it is imperative to obtain greater clarity about the content, domain, conceptualization and operationalisation of these dynamic capabilities. To do this, this study will commence with the separation of dynamic capabilities into reconfiguration enabling processes and reconfiguration processes.

Given the paucity of literature in this specific area of small business research, this study will then use the " best practices " for business excellence in small businesses, that are contained in the Malcolm Baldrige National Quality Award Criteria (Baldrige,2004), as the basis for the investigation to describe the strategic processes of small businesses operating in a turbulent environment. This idea of "best practices" is supported by Curteis (1997:269) who said that those enterprises that have the ability to cope with volatility and change in the environment are normally more effective and efficient in their strategic activities. The importance of the efficient and effective use of resources was also pointed out

by Penrose (1959:54) who said that small businesses may achieve superior performance not because they have better resources, but because they make better use of these resources.

Since strengthening dynamic capabilities is a key concern for firms operating in a turbulent environment, this study will also describe mechanisms by which this can be achieved. The study will identify and quantitatively describe the dynamic capabilities of small businesses operating in a turbulent environment. The study will also differentiate these identified dynamic capabilities into those that can be influenced by short term intervention strategies and those that require long term intervention strategies. This differentiation of dynamic capabilities on this basis will create a model that will show how innovative resource configurations can be initiated and sustained in small businesses operating in a turbulent environment. This will lead to the strengthening of the dynamic capabilities of these small firms, i.e. the ability of these small firms to innovatively reconfigure its resources.

In small businesses, this is of particular importance since this sector has been identified as a sector that is not performing optimally, and whose contributions towards economic growth and development, fall short of expectations (Stephenson, 2006:167), despite the fact that theoretically its characteristics are favourable to turbulent environments.

This study will use the retail community pharmacy sector as a model sector to for this study since it is a sector that comprises mainly of small businesses and is currently experiencing environmental turbulence.

1.3 RESEARCH PROBLEM

The review of the literature in Chapter 2 describes the dynamic capabilities or strategic processes that are required by organisations operating in turbulent environments to enable them to innovatively reconfigure their resources. It also highlights the characteristics of these small firms that favour these capabilities i.e. flat and flexible structures; structural simplicity; streamlined operations; a lack of structural inertia; entrepreneurial and risk oriented leadership; informal, dynamic strategies; high innovatory potential; personalised management; the ability to seek out protected market niches that are too small or not important enough for larger firms and better customer service(Beaver and Jennings,2005:9; Davis, Hills and LaForge, 1985:31; Hudson, Smart and Bourne, 2001:1096; Porter,1980;Hitt, Hoskinsson and Harrison, 1991:7 and Boone and Kurtz, 1996:125). From this, it

is expected that small businesses despite their turbulent environments comprise a sector that is the driving force of economic growth and job creation (Sunter, 2000: 23).

However, according to the then South African Minister of Trade and Industry, Alec Erwin (Hudson and Darrol, 2003), the South African, small-business sector is more than a decade away from where it should be. Furthermore, the Global Entrepreneurship Monitor Survey (S.A, 2004:10) has found that South Africa ranked 24th out of 34 countries in terms new business formation. From this it can be seen that there is a business and management problem viz. "How to optimise the performance of small businesses operating in a turbulent environment "

Since the literature review in Chapter 2, points out that the strengthening of the dynamic capabilities of small firms operating in a turbulent environment will increase their ability to be successful in these environments, it is therefore important to be able to determine strategies to strengthen these capabilities. Thus from this emerges the research problem viz. "How to strengthen the dynamic capabilities of small businesses operating in a turbulent environment".

According to the literature review in Chapter 2, two reasons that are often cited for small business failures are the paucity of management skills and the paucity of resources. Thus, effective strategies to reduce these failures revolve around two dimensions : firstly, the organisation's management capability and secondly, the resource base of the firm (Rindova and Taylor ,2002:6 ; Wilkes and Dale ,1998:731; Shin et al ,1998:10; Ahire and Golhar ,1996:1 and Welsh and White,1981:18).

The findings relating to the management capability dimension are supported by other surveys of small business failure which have also found that while entrepreneurs often have good ideas and are competent, they do not know how to run a business and have no underlying appreciation of business fundamentals (Barron, 2000:1; Brink, 1997:364). Ligthelm and Cant (2002:1) also found that deficiencies in its internal environment are the major cause of small and medium enterprise failures. These deficiencies revolve around poor management skills. In addition, Stephenson (2006:167) specifically highlighted that these firms also suffer from a lack of management education.

The findings relating to the resource base dimension are also supported by other studies that attribute the failure of small businesses to resource limitations (Wilkes and Dale, 1998:731, Shin, Kalinowski and El-Enein, 1998:10 and Ahire and

Golhar, 1996:1). In addition, Welsh and White (1981:18) have also stated that because small businesses are resource impoverished, they face significant disadvantages when competing head-to-head against larger businesses.

Dodgson and Bessant (1997: 13) have defined resources as: “All the assets of the firm - technological, financial, managerial and organisational -which enable firms to operate in markets. They comprise more than tangible assets, and include the intangible assets such as the skills and knowledge of the workforce”. From this definition, it can be seen that whilst management capability has specifically been cited as a reason for small business failure, it is also a small business resource.

Since small businesses are resource impoverished, strategies to strengthen the dynamic capabilities of small businesses operating in a turbulent environment that are directed at the level of management capabilities will achieve a quicker result than strategies directed at the level of the general resource base of the firm. Since management capabilities are also part of the resource base of the firm, increasing management capabilities will also increase the resource base of the firm. In addition, Kozan, Oksoy and Ozsoy (2006:114) have stated that by improving management know-how, the resource aggregation capability of the small firm is improved.

From this emerges the study’s proposed solution to the research problem and hence the business and management problem viz. “A rational, specific and targeted approach to strengthening the dynamic capabilities of small businesses operating in a turbulent environment. This approach will be elucidated in a model proposed by the study. The model will differentiate dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer-term strategy of altering the general resource base of these small firms. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments, optimised.”

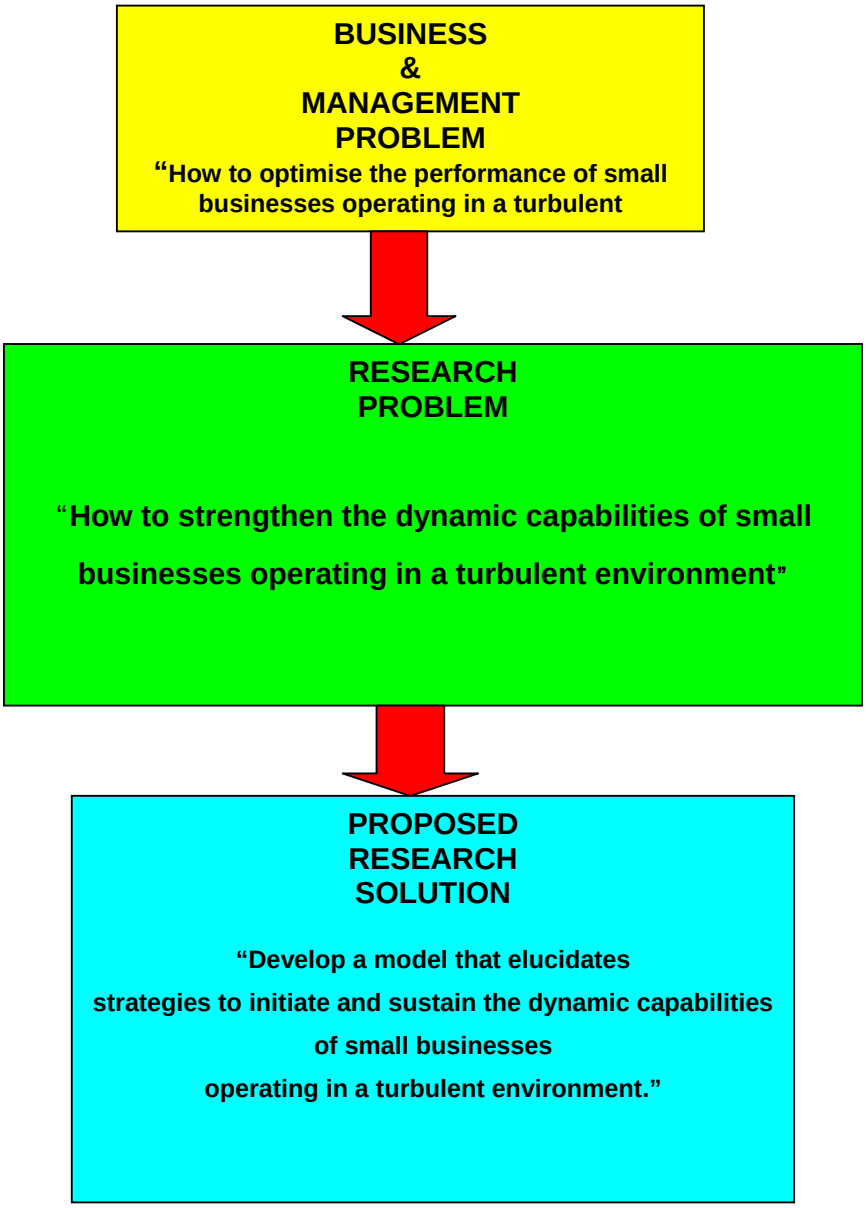

FIGURE 1: THE MANAGEMENT AND BUSINESS PROBLEM, RESEARCH PROBLEM AND THE PROPOSED RESEARCH SOLUTION

1.4 THE IMPORTANCE/IMPLEMENTATION APPROACH

In order to investigate the research problem identified Section 1.3, this study's focus is on the level of importance and extent of implementation of strategic processes of small businesses operating in a turbulent environment.

The examination of the allocation of resources by small businesses operating in a turbulent environment to specific processes through their extent of implementation will enable the determination of which processes receive the most resources, which the least and which compete with each other for the scarce resources that are available in these resource impoverished small firms

The examination of the management capability of small businesses operating in a turbulent environment with respect to the innovative reconfiguration of resources through the level of importance of each process will enable the determination of which process the leadership of these small firms have the greatest capability in, which the least and which, if there are differing levels of importance for the processes, compete with each other for the scarce resources that are available in these resource impoverished small firms.

Since dynamic capabilities deal with the innovative reconfiguration of resources, management decisions to allocate scarce resources to specific processes will determine the type and extent of innovative reconfigurations that take place. Thus understanding how resources are allocated in small businesses operating in a turbulent environment will enable the identification of those dynamic capabilities that have a low level of resource allocation and which consequently need to be strengthened.

This is supported by Adner and Helfat (2003: 1011), who have stated that managerial decisions are acknowledged as some of the most critical antecedents of capability transformation. Branzei and Vertinsky (2006:75) have also emphasised that suitable strategic choices can help firms overcome the constraints of their existing resource endowments by guiding the development of extant skills and by facilitating the emergence of new capabilities. These strategic manoeuvres can modify a firm's current capability- development trajectory by influencing the range and depth of external cues noticed the framing of these stimuli as threats or opportunities for action, a firm's speed of reaction, and/or the specific actions taken in response (Branzei and Vertinsky, 2006:75).

The importance/implementation approach also lends itself to the determination of whether the level of importance placed on a process affects its implementation. By the use of appropriate statistical testing, as reported on in Chapter 3, the testing for significance of difference between the level of importance and the extent of implementation provides an indication of which processes may be influenced by an alteration of the importance perception, and by extension the management capabilities of small businesses operating in a turbulent environment. According to Kozan, Oksoy and Ozsoy (2006:114) small business growth was positively influenced by owner intensity, a construct of which importance placed on activity is a component; and according to Korman (1970:31), the theory of work motivation states that people will be motivated to behave and perform in a manner that is consistent with their self-concept. Thus, the importance that a person places on a skill affects that person's behaviour.

Where there is no significant difference between the level of importance and extent of implementation of these processes, the extent of implementation and by extension their resource allocation, will be influenced by an alteration of the importance perception, and by extension the management capabilities, of small businesses operating in a turbulent environment.

The converse of this is that where there is a significant difference between the level of importance and extent of implementation of these processes, the extent of implementation and by extension their resource allocation, is uncoupled from the importance perception, and by extension from their management capability. In these instances, extent of implementation will be influenced by an alteration of the general resource base.

Since the study's envisaged solution to the research problem revolves around a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment, the importance/implementation approach is a particularly suitable and appropriate approach to this study as it enables the differentiation of dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer-term strategy of altering the general resource base of these small firms.

1.5 THE PURPOSE OF THE STUDY

In order to achieve the envisaged solution to the research problem of this study, the main purpose of the research is to investigate the strategic processes of small businesses operating in a turbulent environment. The core elements of this purpose comprises of:

1. The conceptual identification and the separation of dynamic capabilities into those processes that are reconfiguration enabling processes and those processes that are reconfiguration processes.

2. The conceptualisation of strategic processes or dynamic capabilities with a specific set of measurable “best practice” processes that capture and incorporate the idea of strategic processes or dynamic capabilities while being grounded in empirical research.

3. The quantitative identification and description of the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment and their resource allocation.

4. The development of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. The model will differentiate dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer-term strategy of altering the general resource base of these small firms. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments will be optimised.

1.6 THE RESEARCH OBJECTIVES

The research purpose of this study will be achieved through the attainment of the following research objectives:

1. To quantitatively identify and describe the strategic processes of small businesses operating in a turbulent environment.
2. To establish and quantify the level of importance of strategic processes in these small businesses.
3. To establish and quantify the extent of implementation of strategic processes in these small businesses.
4. To determine from the identified strategic processes, which processes have statistically significant gaps between their level of importance and extent of implementation and which have no significant gaps.
5. To quantitatively identify and describe how small businesses operating in turbulent environments allocate their scarce resources to strategic processes.
6. To differentiate between those strategic processes that can be influenced by short term intervention mechanisms and those that require long term intervention mechanisms.
7. To use the differentiated processes to form the basis of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments will be optimised.

1.7 THE RESEARCH PROPOSITIONS

The following research propositions will be comprehensively motivated for in Chapter 2. The methodology describing the process of proposition formulation is reported on in Chapter 3.

Proposition 1:
If there is a positive correlation between the level of importance and extent of implementation of strategic processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Proposition 2:
If there is a positive correlation between the level of importance and extent of implementation of reconfiguration enabling processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Proposition 3:
If there is a positive correlation between the level of importance and extent of implementation of reconfiguration processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

1.8 THE DEMARCATION AND SCOPE OF THE STUDY

Since the literature review reveals a paucity of research on strategic processes of small businesses operating in a turbulent environment, this study commences with a qualitative, exploratory and descriptive approach. It then progresses to quantitative analyses to enable the achievement of the research purpose and the research objectives and to satisfy the research propositions. The following aspects should be noted:

1. The study covers the theory on small businesses, strategic processes and the dynamic capabilities of firms operating in turbulent environments as revealed in the literature review.

2. Due to the paucity of research on the strategic processes of small firms that operate in a turbulent environment, the study extends the theory on dynamic capabilities of firms operating in turbulent environments to small businesses. The following assumptions thus are made:

    - The theory on dynamic capabilities of firms operating in turbulent environments is applicable to small businesses.
    - The strategic processes of small firms that operate in a turbulent environment are the firm's dynamic capabilities. Hence the terms are used interchangeably in this study.

3. From the literature review, this study finds that dynamic capabilities consist of reconfiguration processes and reconfiguration enabling processes and that reconfiguration enabling processes lead to reconfiguration processes that give rise to value –added strategies and hence competitive advantage. This is a conceptually designed linkage. This study will not test this linkage. The empirical testing of this linkage is a recommendation made in this study in Chapter 6 for future studies.

4. There will be no empirical testing of the conceptually identified links between management education and the importance perception of managers, the importance perception of managers and the management capability of the small firm, management capability of the small firm and dynamic capabilities or the link between the resource base of the small firm and dynamic capabilities. The empirical testing of these linkages are recommendations made in this study in Chapter 6 for future studies.

5. The study will make no distinction between owner-led and manager-led small businesses. A specific segmentation of small businesses into these two categories and further testing is a recommendation made in this study in Chapter 6.

6. The dimension of management capability that is investigated in this study will be looked at solely from the view point of management skills and knowledge of management practices and processes. An analysis of the components of management capability and further testing on the impact of each component on the reconfiguration of resources is a recommendation made in Chapter 6.

7. The study will use the retail community pharmacy sector as a model sector to describe the strategic processes of small businesses operating in a turbulent environment as it is a sector that is currently experiencing environmental turbulence and is comprised of mainly small businesses.

1.9 THE RESEARCH DESIGN

Business research can be defined as a systematic investigation of phenomena of interest to business decision makers. The use of scientific business research, which is a specialized type of investigation characterized by the rigor of the analytical tools and techniques applied, can result in research-based decision making becoming an important tool for those organizations seeking competitive advantage. Some of the defining characteristics of scientific business research are:

- The purpose of the research must be clearly defined
- The research process must be detailed in a research proposal;
- The research design must be thoroughly planned
- The limitations must be frankly revealed
- The analysis of the data must be sufficiently adequate to reveal its significance and the methods of analysis should be appropriate
- The findings must be presented unambiguously
- The conclusions must be justified

(Cooper and Schindler, 1998: 14-18)

The research purpose and the research objectives and the research propositions are stated in this chapter as well as the scope and demarcation of the study and the study limitations. The research design is also described in this chapter. In chapter 2, research propositions are derived from scientific literature, as well as from existing research. The research methodology is described in Chapter 3. The qualitative and quantitative findings are presented in Chapter 4. The results are discussed in Chapter 5 and these form the basis of and justify the conclusions presented in Chapter 6.Research design is defined as a plan that shows, through discussion, how the evidence will be used to make inferences (King, Keohane and Verba, 1994:118).

1.9.1 THE TYPE OF STUDY

This research study will be a cross-sectional, formal, qualitative and quantitative study. The qualitative aspect will be carried out via a series of personal interviews while the quantitative aspect will use an *ex post facto* statistical design to investigate the strategic processes carried out by small businesses operating in turbulent environments.

Research serves many purposes. Some of the purposes of research are: *to explore, to describe;* and *to explain* phenomena (Cooper and Schindler, 1998: 10; Babbie, 1995:84).

Exploratory research gives insights into the research methods that could provide the answers to research problems or hint at answers but seldom provides answers to research questions. Exploration is usually the purpose when the subject is relatively new, either in general or to the researcher (Babbie, 1995:8). Descriptive research tries to discover answers to the questions *who*, *what*, *when*, *where* and sometimes *how*. However, a descriptive study does not explain why an event occurred or why the variables interact the way they do (Cooper and Schindler, 1998: 11). An explanatory study goes beyond description and attempts to explain reasons for the phenomena that the descriptive study only observed (Cooper and Schindler, 1998: 11-12).

This study will commence with an initial qualitative, exploratory approach since the review of the literature reveals that the subject is relatively new. This research study will also incorporate a quantitative, descriptive approach in that it seeks to quantitatively identify and describe *what* specific strategic processes are important to small business owners, and *how* they are implemented. Furthermore, this study will also be explanatory and inferential, in that it will go beyond description to achieve its envisaged solution to the research problem.

The study will also follow a theory –generating strategy, viz., the grounded theory approach. In this approach, a study commences with loose definitions of the key concepts and some speculative initial propositions. Observations are then made and these are used to refine and redefine the initial concepts and propositions. The process is repeated until what is held to be a robust interpretation is generated (Curran and Blackburn, 2001:41).

1.9.2 THE PRIMARY DATA COLLECTION METHODOLOGY

Research designs can also be classified by the approach used to collect primary data, viz. the observational approach or the communication approach. The communication approach is questioning or surveying people and recording their responses for analysis. Questioning is more efficient than observation and its greatest strength as a primary data collecting technique is its versatility. Abstract information of all types as well as opinions, attitudes, intentions, expectations and information about events is often only available through questioning. However, the major weakness of this approach is that the quantity and quality of information secured depends heavily on the ability and willingness of the respondents to co-operate (Cooper and Schindler, 1998:287).

This study used the communication approach – through questioning of the small business owner – to obtain the required data with respect to the level of importance and extent of implementation of strategic processes in small businesses.

The communication approach of this study was dealt with both qualitatively and quantitatively. The qualitative communication approach used the personal interview technique (semi-structured), while the quantitative communication approach used the self-administered mail survey technique.

The initial exploratory nature of this research required the depth of information and detail that could be secured from personal interviews, which Cooper and Schindler (1998:291), describe as the greatest strength of this technique, while the formal, descriptive and explanatory nature of this research benefited from the self-administered mail survey technique, which according to Cooper and Schindler, (1998:304), enables anonymity and a greater geographical coverage.

Due to the paucity of information on the strategic processes of small businesses operating in a turbulent environment, this study commences with a qualitative, exploratory approach. This approach which uses the personal interview methodology, provides several key themes which are then explored in the literature and used as the basis for the questions in the instrument.

Furthermore, small businesses are organic and loosely structured, rather than mechanistic and highly formalised. Thus, the processes in a small firm are seldom readily visible (Beaver and Jennings, 2005:9). Therefore the qualitative approach is an especially appropriate method with which to commence this study's

investigative process. However, Beaver and Jennings (2005:9), also note that despite this loose and less formal approach to management processes in small businesses, certain essential management activities that have been defined and refined throughout a long history of management research must be carried out. Hence, this study has combined the qualitative approach with a quantitative approach that uses identified “best practices” for small business excellence as its basis. This approach is also supported by Cooper and Schindler (1998:309) who state that using a mixed-mode of communication with respondents enables the tailoring of the research method to suit the unique needs of a study.

1.9.3 THE RESEARCH PLAN

This study will follow a research plan in the nine stages outlined below:

Stage 1: The formulation of the research problem

The research problem to be investigated will be formulated from literature that examined the background to the problem. This research stage is reported in Chapter 1.

Stage 2: The identification of the research purpose and the research objectives

Using the identified research problem, the research purpose and the research objectives will be identified. This research stage is reported in Chapter 1.

Stage 3: The literature review

A detailed literature review will be performed on strategic processes, dynamic capabilities, small business, quality, turbulent environment and changing environment. This research stage is reported in Chapter 2.

Stage 4: The qualitative approach

An exploratory, qualitative investigation will be performed through the conduction of personal interviews with six small business owners, all retail community pharmacists. Key themes emerging from these interviews will inform the questionnaire development process. This research stage is reported in Chapter 3.

Stage 5: The design of the instrument

Using the literature review and the key themes from the qualitative investigation, a draft questionnaire will be developed to ensure that the research purpose and objectives are achieved and the research propositions are satisfied and in so doing, lead to a solution to the research problem. This questionnaire will be evaluated by a panel of six experts, prior to being administered in the pilot study. This research stage is reported in Chapter 3.

Stage 6: The pilot study

The pilot questionnaire will be distributed to ten respondents that are similar in profile to the target population. The results of the pilot study will be analysed using the SPSS 11.5 statistical package to ensure that the required validity and reliability parameters are met. This research stage is reported in Chapter 3.

Stage 7: The development of the research propositions

Based on the literature review, the results of the expert panel evaluation, the results obtained from the pilot study and the results of the qualitative analysis, research propositions will be developed. This methodology of research stage is reported in Chapter 3 and the research propositions and motivated for and reported in Chapter 2.

Stage 8: The refinement of the final questionnaire and its administration

Based on the results of the pilot study, the final questionnaire will be refined and then administered to the chosen sample of respondents. This research stage is reported in Chapter 3.

Stage 9: Data Analyses

Quantitative statistical analyses will be performed on the returned questionnaires using the SPSS 11.5 statistical package. These are reported in Chapter 4.

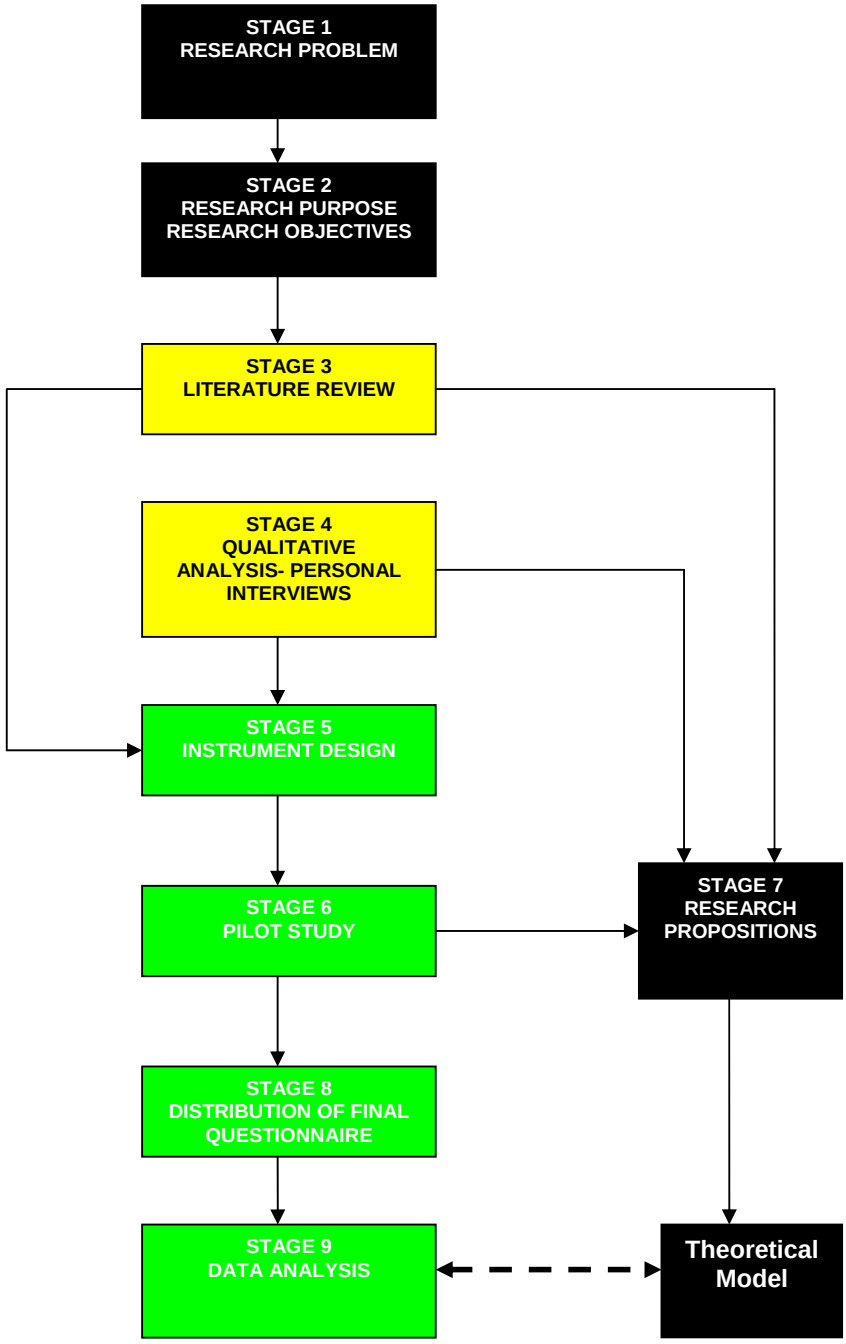

FIGURE 2: A FLOWCHART OF THE RESEARCH PLAN

1.10 THE LIMITATIONS OF THE STUDY

The following are the main limitations of this study:

1. Only small firms, according to this study's definition of small firms are included in the study. This study recommends, in Chapter 6, that this investigation be extended to small firms of different sizes.

2. The age of a firm or stage in its life cycle is not considered. This study recommends in Chapter 6, that this investigation be extended to small firms of different ages or stages in the life cycle.

3. The retail community pharmacy sector is used as a model sector to examine the strategic processes of small firms that operate in a turbulent environment. This is a highly regulated sector and these findings may not be applicable to sectors of small firms that belong to unregulated sectors. Chapter 6 recommends that this investigation be carried in other small business sectors.

4. The study does not empirically test the conceptually identified links. The empirical testing of these linkages are recommendations made in this study in Chapter 6 for future studies.

1.11 THE OUTLINE OF THE THESIS CHAPTERS

The chapters in this thesis are outlined as follows:

Chapter One:

This chapter introduces the study. It states the research problem, the research purpose, the research objectives and the research propositions and explains its use of the importance/implementation approach. This chapter also demarcates the study, outlines the scope of the study, defines the research limitations and explains the research design. The chapter outline is also given.

Chapter Two:

The literature is reviewed and propositions are motivated for in this chapter. Small businesses are defined and characterised, strategic approaches in turbulent environments are explored and the concept of dynamic capabilities is discussed. A conceptual distinction is made between reconfiguration enabling processes and reconfiguration enabling processes and the literature is searched for “best practice" processes of performance excellence in small businesses. This leads the discussion to the Malcolm Baldrige Quality Award criteria, which together with the reconfiguration and reconfiguration enabling processes is used as a comprehensive lens through which to view the strategic processes of small businesses. A set of strategic processes for small businesses operating in a turbulent environment are generated. This chapter also explains why the retail community pharmacy sector is used as a model sector for this study. In his chapter the importance of the study and the choice of the model sector are also explored. The importance of the study is looked at from three perspectives: the importance in the practice environment- small businesses, the importance to management theory and the importance to the practice environment-retail community pharmacy.

Chapter Three:

This chapter indicates the research stages and the research elements. The methodology used for theory building and proposition development is also explained. It also describes the qualitative and quantitative approaches to this study. The design of the questionnaire, nature of measurement, the soundness of the measurement and sampling and population elements are detailed. The pilot

study methodology and results are reported here. The approaches that the study uses to prepare and analyse the data are also described in this chapter.

Chapter Four:

The data is analysed and the results are presented in this chapter.

Chapter Five:

The chapter commences with a broad description of the strategic processes of small businesses that operate in a turbulent environment and proceeds with an initial examination of the importance – implementation gap at the general level, then an examination at the process cluster level and then finally an examination at the individual process level. The results obtained from these analyses show a clear picture of the resource allocation and the resource allocation drivers in small businesses operating in a turbulent environment.

Chapter Six:

In this chapter the major findings of the study are presented and the recommendations for future research are highlighted.

Annexures:

The annexures that are attached to this thesis after chapter 6, contain the pilot questionnaire, the final questionnaire, all the relevant data obtained from the analysis of these questionnaires and the list of references used.

1.12 THE CHAPTER CONCLUSIONS

This chapter introduced the study, stated the research problem, the research objectives and the research propositions, explained the study's use of the importance/implementation approach, demarcated and outlined the scope of the study, defined the research limitations, explained the research design and provided the thesis chapter outlines.

The next chapter will review the literature to provide a theoretical background to the study and motivate for and justify the propositions developed.

CHAPTER TWO

LITERATURE REVIEW

CHAPTER 2: THE LITERATURE REVIEW

2.1 THE CHAPTER SUMMARY

The aims of this chapter were to review the literature review to provide a theoretical background to the study and motivate for and justify the propositions developed.

This literature review chapter commenced with the definition and characterisation of small businesses. Turbulent environment were defined and strategic approaches to these turbulent environments were then explored. The literature indicated the inadequacy of traditional strategic processes in turbulent environments and pointed to the need for new strategic processes that would enable the continuous adaptation, innovation and reconfiguration of resources to create value-adding strategies and competitive advantage; a perspective consistent with the dynamic capabilities view.

In general, the literature review revealed a paucity of literature and research on the strategic processes of small businesses operating in a turbulent environment. Nonetheless, since the literature on dynamic capabilities indicated that there are “best practices“ in the execution of dynamic capabilities, “best practices” for excellence in small business excellence were identified in the Malcolm Baldrige Quality Award Criteria.

To obtain clarity about what dynamic capabilities really are, the literature was searched to extract relevant and cohesive themes that would enable the conceptual separation of dynamic capabilities into reconfiguration enabling processes and reconfiguration processes. The literature identified the processes of “patching” and “co-evolving” as reconfiguration processes. Four reconfiguration drivers were also identified viz.: environment and opportunity sensing, knowledge acquisition and learning, co-ordination and regulation and alignment and integration. These reconfiguration drivers were found to be embodied in the “best practices “ of the Malcolm Baldrige National Quality Award Criteria.

Using the identified reconfiguration enabling processes, reconfiguration processes and themes that emerged from the personal interviews, this chapter synthesised a set of strategic processes for small businesses operating in a turbulent environment. This set of strategic processes was used as the basis for the questionnaire to be distributed to the respondents of this study.

The literature was also reviewed to provide support for the propositions that were generated, using the methodology described in Chapter 3.

A general synthesis of the literature also revealed the importance of the study in the practice environment for the small business and for small business theory and the general body of management theory.

The environmental turbulence created in the retail community pharmacy sector by the new pricing structures, single exit prices, the opening of ownership of pharmacies to persons other than pharmacists, the creation of designated service providers by service payers and the issue of dispensing licences to healthcare professionals who are not pharmacists, provided justification for the use of this sector to model the strategic processes of small businesses operating in a turbulent environment. The importance of the study to this sector was also explained, in terms of increasing the knowledge of how resources are reconfigured in this sector, in the light of this sector's duality viz. its focus on professionalism versus its focus on mercantilism.

2.2 INTRODUCTION

According to Mouton (2001:87) and De Vos (2002:128), literature reviews are an integral part of empirical research. A review of literature and research on similar topics enables exposure to the most recent and authoritative theorizing and empirical findings applicable to the subject being researched as well as the prevention of duplication of previous studies. It is only after the establishment of what others have done and after the engagement of subsequent research that a researcher may contribute to new academic knowledge (Mouton & Marais, 1996:161 and Babbie, 1998:147).

In this study, *new* refers to:

- The conceptual identification and the separation of dynamic capabilities into those processes that are reconfiguration processes and those processes that are reconfiguration enabling processes ;

- The conceptualisation of strategic processes or dynamic capabilities with a specific set of measurable " best practice" processes that capture and incorporate the idea of strategic processes or dynamic capabilities and that are grounded in empirical research;

- The quantitative identification and description of the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment and their resource allocation;

- The development of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments will be optimised.

The literature review did not reveal any prior study of this nature both nationally, in South Africa as well as internationally.

The theoretical information required for this study was obtained through a literature search using both hard copy and electronic media. The choice of literature databases that was searched was based on the level of appropriateness

of the databases to the topics being reviewed. Validation by peer review, purpose, scope, authority and format formed the basis of evaluation of the content of each source prior to the inclusion of these secondary and tertiary data sources in the literature review.

The following electronic journal databases were used extensively:

- ABI/Inform Global (Proquest)
- Academic Search Premier (Ebsco Host)
- Business Source Premier (Ebsco Host)
- Academic Research Library (Proquest)
- General Business File International (Gale Group)
- Emerald
- Swetswise
- Elsevier

Using keyword search queries, Boolean logic was used for the research keywords and key phrases - strategic processes, dynamic capabilities, small business, quality, turbulent environment and changing environment.

2.3 SMALL BUSINESSES

2.3.1 THE DEFINITION OF A SMALL BUSINESS

Researchers and policymakers describe small firms in different ways. Robinson and Pearce (1984:80) found that firms could typically be defined on the basis of either annual sales or number of employees and that even between these two measures there is wide variability, in that the definition a small business can range anywhere from one to 200 employees; while Keats and Bracker (1988:41) found that on the measure of annual sales, researchers define small businesses as those businesses with a turnover falling in the range from under $150 000 to less than $150 million.

A small business is broadly defined by the U.S. Small Business Administration (SBA, 2004) as “one that is independently owned and operated, and which is not dominant in its field of operation” and on a more detailed level, as one that is organised for profit, has a place of business in the United States, makes a significant contribution to the U.S.economy by paying taxes or using its products, material or labour and does not exceed the numerical size standard for its

industry. It further defines a small business in the retail trade as one that has a turnover of less than $6 million.

In South Africa, the White Paper on small business, published by the Department of Trade and Industry, was tabled in Parliament in 1995. Its main objective is to regulate, stimulate and promote small business activities in South Africa. The White Paper (RSA,1995) defines a small business as an established business employing between 4 and 49 workers assumed to be formally registered, clearly demarcated and paying taxes on a regular basis; and a micro-enterprise as one which employs between 1 and 4 workers and has a turnover less than the value added tax registration limit. The South African National Small Business Amendment Bill, defines a small business in the retail sector as having a total full-time equivalent of paid employees of 50 or less, a very small business as having 20 or less and a micro business as having 5 or less (RSA, 2003).

Thus it can be seen that a common, definitive description, used internationally and by both research and practice, does not seem to exist. For the purposes of this research, a small business shall be defined as a business employing less than 50 workers, assumed to be formally registered, clearly demarcated and paying taxes on a regular basis.

2.3.2 THE CHARACTERISTICS OF A SMALL BUSINESS

While small businesses do have features in common with large organisations, they also have unique characteristics and attributes that are reflected in the manner in which they are lead, organised and managed. According to Curran and Blackburn (2001:5), smaller businesses are not just smaller versions of bigger businesses. They have pointed out that small businesses deal with unique size-related issues, behave differently in their analysis of and interaction with, their environment and have distinct and key characteristics that differentiate them from the majority of their larger counterparts. Briefly summarized, these characteristics indicate that small businesses have:

- flat and flexible structures;
- structural simplicity;
- streamlined operations;
- a lack of structural inertia;
- entrepreneurial and risk oriented leadership;

- informal, dynamic strategies;
- high innovatory potential;
- personalised management;
- the ability to seek out protected market niches that are too small or not important enough for larger firms and better customer service; as well as
- poor management; and
- severe resource limitations

(Beaver and Jennings,2005:9; Davis, *et al,* 1995:31; Hudson *et al*, 2001:1096; Porter,1980;Hitt, Hoskinsson and Harrison, 1991:7 and Boone and Kurtz, 1996:125).

According to Ivanova and Gibcus (2003:12), the small firm's economic success, once founded, is determined by the available resources and the specific managerial capabilities. Thus, effective strategies to reduce these failures revolve around two dimensions : firstly, the organisation's management capability and secondly, the resource base of the firm (Rindova and Taylor ,2002:6 ; Wilkes and Dale ,1998:731; Shin et al ,1998:10; Ahire and Golhar ,1996:1 and Welsh and White,1981:18).

The findings relating to the management capability dimension are supported by other surveys of small business failure which have also found that while entrepreneurs often have good ideas and are competent, they do not know how to run a business and have no underlying appreciation of business fundamentals (Barron, 2000:1; Brink, 1997:364). While, a number of authors have also argued that key components in the success/growth of small firms are the competencies, skills and knowledge of their managers (Hendry et al., 1991; Marshall et al., 1995), there is also evidence to suggest that levels of skills in small firm managers are often lacking (Sisson and Storey, 1988; Stanworth and Gray, 1991; Vickerstaff, 1992; Goss and Jones, 1992). Ligthelm and Cant (2002:1) have found that deficiencies in its internal environment are the major cause of small and medium enterprise failures. These deficiencies revolve around poor management skills. In addition, Stephenson (2006:167) specifically highlighted that small firms also suffer from a lack of management education.

The findings relating to the resource base dimension are also supported by other studies that attribute the failure of small businesses to resource limitations (Wilkes and Dale, 1998:731, Shin, Kalinowski and El-Enein, 1998:10 and Ahire and Golhar, 1996:1). In addition, Welsh and White (1981:18) have also stated that

because small businesses are resource impoverished, they face significant disadvantages when competing head-to-head against larger businesses.

Dodgson and Bessant (1997: 13) have defined resources as: “All the assets of the firm - technological, financial, managerial and organisational -which enable firms to operate in markets. They comprise more than tangible assets, and include the intangible assets such as the skills and knowledge of the workforce”. From this definition, it can be seen that whilst management capability has specifically been cited as a reason for small business failure, it is also a small business resource.

2.4 A TURBULENT ENVIRONMENT

According to Andrews (Andrews in Mintzberg & Quinn, 1992: 47), the environment of an organization in business is said to be *“the pattern of all the external conditions and influences that affect its life and development”*.

Turbulence can be caused by the state of, and interaction between, environmental factors. For example, Samli (1993) has said that turbulence is caused by a combination of environmental factors such as business cycles, sudden economic disturbances (for instance, oil crises), mergers leading to oligopolies, growth in importance of information over production, the concentration of economic and political power in the hands of a few, changing consumer lifestyles and behaviour and the downsizing trend in business. This is supported by Nilson (1995) who has also maintained that turbulence is sometimes caused by an industry’s strategic assets being undermined, for example a legal monopoly or dominance due to high entry costs or protection by legislation being removed. An example of this is the Government breaking up a legal monopoly as has happened in the retail community pharmacy sector. This is reported on later in this chapter.

In defining turbulence, some researchers (Cronje et al., 1997; Conner, 1998; Vorhies, 1998), concentrate only on the dynamism in the environment. This involves rapid and unexpected changes in the organization’s environmental sub-dimensions such as technology, customers, competitors, government regulations and new product launches. Dynamism also implies that an organization can not plan only relying on historical data, as they used to. Instead, the organization acts in an environment, where it instead has to foresee what will happen in the future and act accordingly. Brooks and Weatherston (1997) also found that dynamism is an inherent condition of an environment, that is, it is continually changing, but the extent of this change varies for different organizations or environments.

Cronje et al. (1997) have stressed that a stable environment does not change much, and when it does change, the change is predictable; but in a turbulent environment, on the other hand, there are many unexpected changes. Sadler has also emphasized change and dynamism in a turbulent environment by saying that a turbulent environment is *"an environment characterized both by several changes occurring rapidly and simultaneously and by a situation where only the most optimistic see the possibility of a return to a more stable environment in the foreseeable future"* (Sadler, 1996 p. 21). In the retail community pharmacy sector, there are several changes occurring rapidly and simultaneously viz. a new pricing structure at the retail level, single exit price at the manufacturer level, a discontinuance of discounts in the supply chain, the allowing of ownership of retail community pharmacies by persons other than pharmacists, the creation of designated service providers by service payers and the issuing of dispensing licenses to healthcare professionals who are not pharmacists. This causes turbulence in the environment of the retail community pharmacy sector.

Other approaches to defining turbulence incorporate a second parameter together with dynamism i.e. the parameter of complexity (Johnson & Scholes, 1999). This second parameter, complexity, indicates that the environment is difficult to comprehend for an organization and that it consists of sophisticated technology and a high rate of diversity (Johnson & Scholes, 1999). Complexity has also been defined as the measure of heterogeneity or diversity in the environment, that is, the degree to which environmental factors are many and different. These factors include customers, suppliers, competitors and socio-political and technological environments (Chae and Hill, 1997:3; Chakravarthy, 1997:69; Lane and Maxfield, 1996:215).This is again illustrated in the retail community pharmacy sector by a new pricing structure at the retail level, single exit price at the manufacturer level, a discontinuance of discounts in the supply chain, the allowing of ownership of retail community pharmacies by persons other than pharmacists, the creation of designated service providers by service payers and the issuing of dispensing licenses to healthcare professionals who are not pharmacists.

Other researchers, such as Brooks and Weatherston (1997), Chakravarthy (1997:69), Malhotra (1996) and Smith et al. (1999:637) have also defined environmental turbulence as a function of the complexity in the environment it faces and the dynamism and uncertainty in that environment.

These definitions of turbulence that incorporate both dynamism and complexity, are based on Emery and Trist's (1965) causal texture of organizational environments and they incorporate the two key factors – dynamics and complexity

– that are related to environmental change. Emery and Trist, (Emery & Trist in Dessler, 1992), in their classification of environment categories, have described the category, turbulent field, as one of high complexity and rapid changes.

A synthesis of the foregoing elements, leads to a definition of turbulence as, “a dynamic, complex, and unpredictable condition that is subject to both rapid and multi-dimensional change”

Volberda (1997:169) has emphasised two challenges for firms to solve when performing in a turbulent environment. The first is organizational design and the second is the management challenge. In terms of the organizational design, Brown and Eisenhardt (1998) have stated that mechanistic organizations are too structured to allow essential change to happen, while Pascale (1999:83) and Volberda (1997:169) have said that organizations must become less hierarchical. This is emphasised by Chakravarthy (1997:69), Pascale (1999:83), and Tetenbaum (1998:21), who have suggested that organizations should be decentralized or flattened to enable them to become more innovative and open to learning. In addition Tetenbaum(1998:21) has also emphasized the idea of flexibility in organizations operating in a turbulent environment.

These organizational features have been pointed out in the characteristics of small firms in the previous section 2.3.2 which indicated that small businesses have flat and flexible structures; structural simplicity; streamlined operations; a lack of structural inertia and high innovatory potential. However even though small businesses have feature which have been identified as conducive to operating in a turbulent environment; the small business sector has been identified as a sector that is not performing optimally, and whose contributions towards economic growth and development, fall short of expectations (Stephenson, 2006:167).

Thus, following Volberda’s (1997:169) suggestion, an appropriate organizational structure is not enough when coping with a turbulent and rapidly changing environment. The small firm must also solve the management challenge.

According to Crossan, White, Lane and Klus (1996:20) and Hamel (1995:22), traditional strategic processes are inadequate in a turbulent environment; and this type of behaviour causes organisations to be less effective. Turbulence in the environment thus increases the importance of three key strategic processes. First, according to Chakravarthy (1997: 69), conduct among competitors becomes less orderly and more difficult and thus normal strategic processes are inadequate. Second, according to Haleblian and Finkelstein (1993:844), the need for

information increases as the environment grows more turbulent and decision-making becomes more difficult. Third, the need for innovation throughout the organization grows as turbulence increases, since it becomes less possible to predict customer, product and service requirements (Pine, Victor and Boynton, 1993:108; Achrol, 1991:77). Thus, in a turbulent environment, the windows for decision-making are shorter, the risk of obsolescence is greater and long-term control is impossible. As a result managers have to learn new ways of operating in a turbulent environment (Davis, Morris and Allen, 1991:43).

According to Miller (1996:485), the “learning manager” acquires new knowledge and is able and willing to apply that knowledge in making decisions or influencing others in the organisation. Beaver and Jennings (2005: 11) describe the small business the owner as an individual who establishes and manages a business for the primary purpose of furthering personal goals and to whom the business is a primary source of income and which consumes the majority of his/her time and resources. Thus, such a profile would fit the willing part of Miller’s definition. In order to meet the “able “ part of the definition of a “learning manager “, management capabilities are then critical.

Furthermore, a number of authors have argued that key components in the success/growth of small firms are the competencies, skills and knowledge of their managers (Hendry et al., 1991; Marshall et al., 1995:73) and there is also evidence to suggest that levels of skills in small firm managers are often lacking (Sisson and Storey, 1988:3; Stanworth and Gray, 1991; Vickerstaff, 1992:1; Goss and Jones, 1992:13).

The next section will examine the strategic processes of businesses operating in a turbulent environment.

2.5 STRATEGIC PROCESSES IN A TURBULENT ENVIRONMENT

2.5.1 TRADITIONAL STRATEGIC PROCESSES

Conventional and traditional approaches to strategy focus on the question “Where do you want to go?" first, and then “How do you want to get there?” These approaches to strategy entail the selection of attractive markets, choosing a defensible strategic position and building core competencies (Eisenhardt, 1999:65). However, in turbulent markets particular strategic positions are quickly eroded and strategic planning can become irrelevant, so the traditional concept of

strategic processes has become inadequate for better performance. In these markets it is impossible to predict which competencies or strategies will be successful and for how long.

Traditional approaches to strategy also emphasise strategic positioning by acquiring or building valuable resources as the basis of creating sustained competitive advantage and superior, long – term performance. The importance of resources, which includes physical, human and organisational assets that have been used to implement value - creating strategies, is the core of the resource-based view (Kylaheiko, Sandstrom and Virkkunen, 2002:65; Barney, 1986: 656 and Wernerfelt, 1984:171, 1995:171). In this view, resources form the basis of unique value-creating strategies and their related activity systems that address specific markets and customers in distinctive ways, and in so doing, lead to competitive advantage – for example core competencies (Prahalad and Hamel, 1990:79) and configurations (Collis and Montgomery, 1995:118,1998:70 ; Porter,1996:61).

However, Lopez (2005:661) and Eisenhardt and Martin (2000:1105) have pointed out that the resource-based view of the firm does not adequately explain how and why some firms achieve competitive advantage in turbulent markets. Eisenhardt and Martin (2000:1105) have also stated that the resource-based view misidentifies the locus of long-term competitive advantage in turbulent markets markets, overemphasises the strategic logic of leverage and reaches a boundary condition in these markets.

Thus, in a turbulent environment, traditional strategic approaches are inadequate and this type of behaviour causes organisations to be less effective (Crossan, White, Lane and Klus, 1996:20 and Hamel, 1995:22). Therefore the strategic processes used by businesses operating in a turbulent environment must enable the organisation to re-allocate available resources as priorities and demands change (Fowler *et al*, 2000:357) as well as be able to continuously adapt, innovate, and even change themselves in order to survive and thrive in evolving market conditions (Eisenhardt and Tabrizi, 1995:84; Galunic and Eisenhardt, 2001:1229).

2.5.2 NEW STRATEGIC PROCESSES

Today's business environment is probably the most dynamic that any business has faced (O'Regan and Ghobadian, 2005:81). Eisenhardt and Brown (1999:72), have pointed out that in volatile markets, corporate strategy should focus on strategic processes more than on strategic positioning. In these markets, it is impossible to predict which competencies or strategies will be successful and for how long. The implication is that it is more important to build corporate-level strategic processes that enable dynamic strategic repositioning than it is to build any particular defensible position. These new strategic processes turn on change and add economic value by enabling managers to mobilise and reconfigure corporate success to capture market opportunities faster than the competition.

In turbulent markets competitive advantage can be gained by creating a series of temporary advantages. The strategic logic here is that of opportunity sensing (Lengnick-Hall and Wolff, 1999:1109). Sexton and Smilor (1997) describe this process as the creation and recognition of opportunities as well as the pursuit of those opportunities by turning them into wealth creating businesses during a limited window of time.

From Section 2.5.1, it can be seen that in turbulent environments there is a need for the changing of traditional rules, business models and ways of thinking. This re-invention of industries and business models is about the creation of new bundles of products and services and the re-structuring of value chains. According to Linder, Jarvenpaa and Davenport (2003:43) innovation is the implementation of new ideas that create value and according to Hamel (1997:70), strategic-innovation is the ability to reinvent the basis of competition within existing industries and to reinvent entirely new industries. Strategic innovativeness is thus a major success factor for businesses operating in a turbulent environment (Recklies, 2001: 3).

Jansen, Van den Bosch and Volberda (2005:351) have echoed these trends of thought in their concept of organisational ambidexterity, which describes the ability of a firm to pursue exploratory and exploitative innovations simultaneously. This they say is crucial to firm survival. Successful innovations are thus the results of a deliberate search for and a high alertness to new opportunities (Wiklund and Shepherd, 2005:71; Hausman, A, 2005:775). The values created by innovations are often manifested in new ways of doing things and processes that contribute to wealth. By implication, then, the failure to innovate is likely to result in reduced competitiveness (O'Regan and Ghobadian, 2005:81).

Since innovation enhances the competitiveness of firms (Neely and Hii, 1998) in dynamic environments, firms should have the capabilities to innovate (Nelson and Winter, 1982; Zollo and Winter, 1999:339; Teece et al, 1997:509). Therefore the strategic processes used by businesses operating in a turbulent environment must enable the organisation to continuously adapt, innovate, and even change themselves in order to survive and thrive in evolving market conditions (Eisenhardt and Tabrizi, 1995:84, Galunic and Eisenhardt, 2001:1229) as well as be able to re-allocate available resources as priorities and demands change (Fowler et al, 2000:357). This perspective is consistent with what is termed by the literature as dynamic capabilities. According to Branzei and Vertinsky (2006:75), sustained innovativeness depends on each firms set of dynamic capabilities. From a Schumpeterian perspective, dynamic capabilities enable a firm to innovate and make that innovation profitable over and over again (Schumpeter, 1934).

2.5.2.1 DYNAMIC CAPABILITIES

While the exact nature of dynamic capabilities is still not yet well understood, their visible outcome is the transformation of existing resources into new functional competencies that better match the environment (Arthurs and Busenitz,2006:195; Eisenhardt and Martin, 2000:1105). This view of dynamic capabilities has its genesis in Schumpeterian competition (Schumpeter, 1934), where competitive advantage is based on the creative destruction of existing resources and the novel reconfiguration of new, and potentially rent-generating functional competencies.

The emerging literature on dynamic capabilities draws on the resource-based view of the firm (Lopez, 2005:661; Wu, 2005; Dutta, Narasimhan and Rajiv, 2005: 277; Kylakeiko, Sandstrom and Virkunnen,2002: 65; Branzei and Vertinsky, 2006:75; Knudsen and Madsen, 2002:475; Hayes et al, 1998; Itami, 1987; Iansiti, 1994:557; Teece and Pisano, 1994:537; Kogut and Zander, 1992:383; Nelson and Winter, 1982; Teece et al, 1997:509) which states that the firm's resources are an essential structure for innovation. The dynamic capabilities view is an extension of this resource-based view (Makadok, 2001:487). The resource-based view emphasises the selection and accumulation of synergistic combinations of resources (Barney, 1991:771) and the dynamic capabilities view stresses the reconfiguration of existing resources into new functional competencies (Arthurs and Busenitz, 2006:195; Eisenhardt and Martin, 2000:1105; Teece et al, 1997:509).

According to Eisenhardt and Martin (2000:1107) some dynamic capabilities integrate resources; some are related to the gain and release of resources while some focus on the reconfiguration of resources. Zollo and Winter (1999: 10) have offered the definition of dynamic capabilities as "a learned pattern of collective activity through which the organization systematically generates and modifies its operational routines" while Galunic and Eisenhardt (2001:1229) have argued that the existence of dynamic capabilities is assumed without specifying the particular processes that form these capabilities.

Dynamic capabilities have also been described as the **drivers behind** the creation, evolution and reconfiguration of other resources into new sources of competitive advantage (Henderson and Cockburn, 1994: 63; Teece *et al*, 1997: 509); while Eisenhardt and Martin (2001: 1107) have specifically defined dynamic capabilities as the "firm's processes that use resources – specifically the **processes to integrate, reconfigure, gain and release resources** – to match and even create market change. Dynamic capabilities thus are the organisational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die ". The literature also refers to dynamic capabilities as complex and tacit (Dierickx and Cool, 1989:1504), causally ambiguous, difficult to observe (Simonin 1999:595) and difficult to conceptualize, operationalise and measure (D'Adderio 2001: 1409).

However, while these descriptions stress the importance of reconfiguring existing resources into new configurations of functional competencies and view reconfiguration as the ultimate outcome of dynamic capabilities, the conceptual ambiguity surrounding the idea of dynamic capabilities leads to a blurring between the reconfiguration enabling processes and the actual reconfiguration processes that lead to innovative resource reconfigurations and value-added strategies. There is a lack of clarity about the nature of dynamic capabilities, and even disagreement about whether such capabilities even exist (Winter, 2003: 991). This makes it imperative to introduce a greater clarity about their content, domain, conceptualization, and operationalisation.

Therefore the following section will first conceptually distinguish between the reconfiguration enabling processes and the actual reconfiguration processes that lead to innovative resource reconfigurations and value creating strategies. The next section will show how dynamic capabilities are linked to competitive advantage in turbulent environments and thereafter, following the logic of Eisenhardt and Martin(2000:1107) who have specifically stated that " dynamic capabilities actually consist of identifiable and specific routines that often have

been the subject of extensive empirical research in their own right outside of the resource-based view", this literature review will conceptualise dynamic capabilities with a specific set of measurable " best practice " processes that capture and incorporate the idea of dynamic capabilities and that are grounded in empirical research.

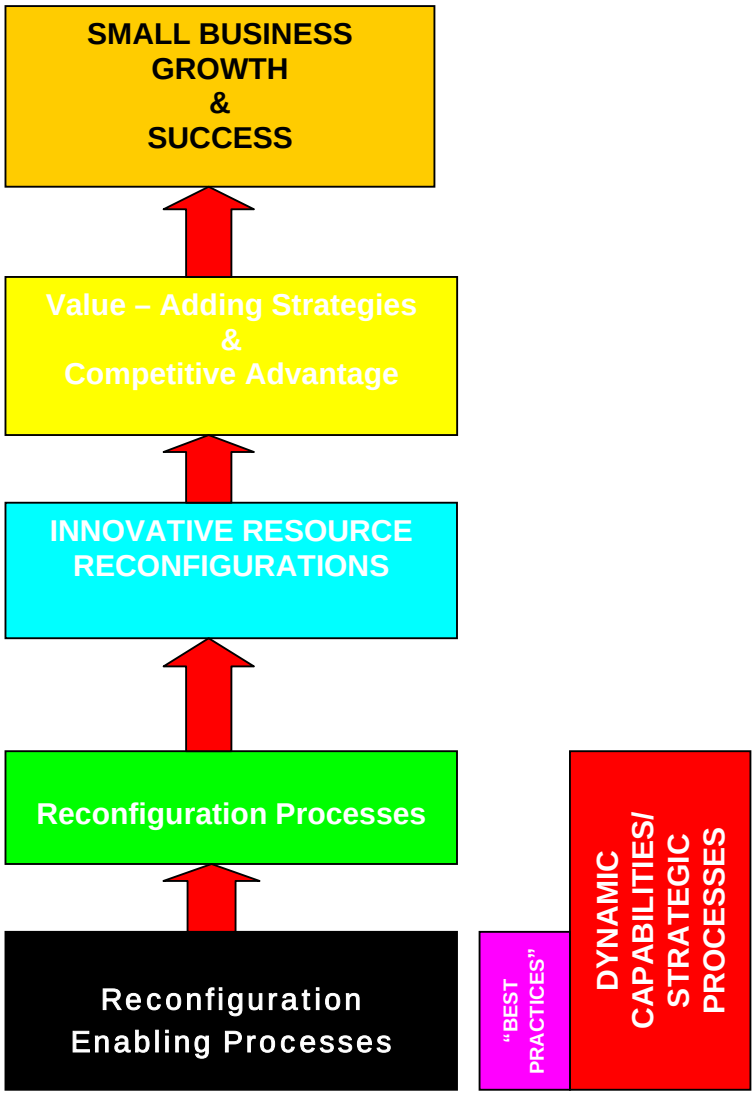

FIGURE 3: DYNAMIC CAPABILITIES OR STRATEGIC PROCESSES

2.5.2.1.1 THE RECONFIGURATION PROCESS

The reconfiguration process is the innovative redeployment of existing resources into a new set of functional competencies (Abernathy and Clark, 1985:3; Henderson and Clark, 1990:9).

For example, Eisenhardt and Martin (2000:1107), have introduced the processes of patching and co-evolving:

- Patching the business portfolio, means the frequent re-mapping or re-structuring the enterprise in order to fit changing market opportunities. By dynamically adjusting the business in order to match changing market opportunities, managers are directed toward high-potential businesses, activities or products, uncovering the profit levers that drive effective strategy of those businesses, and creating economic value for the enterprise. Restructuring can take the form of combining, adding, splitting, exiting or transferring.

- Coevolving is a subtle strategic process, involving the creation of a flexible business portfolio with both collaborative and competitive units and a superior strategy based on cross-business synergies in performing business activities.

The reconfiguration process deploys superior new configurations of functional competencies that better match the environment.

2.5.2.1.2 RECONFIGURATION ENABLING PROCESSES

The idea of enabling processes to facilitate reconfiguration is consistent with the view of dynamic capabilities as tools that underlie the ability to create new configurations (Galunic and Eisenhardt, 2001:1229). Four key drivers of reconfiguration (Table 1) have been identified from the dynamic capabilities and related literatures. They are environment and opportunity sensing, knowledge acquisition and learning, co-ordination and regulation and alignment and integration.

- **ENVIRONMENT AND OPPORTUNITY SENSING**

This helps to identify market needs and spot new opportunities (Zahra and George, 2002:185). It is the process of generating, disseminating and responding to market intelligence about customer needs (Jaworski and Kohli, 1993:53; Kohli and Jaworski, 1990:1). By generating market intelligence, (Sinkula, 1994: 35; Slater and Narver, 1995: 63) market trends are sensed and new market opportunities are discovered (Galunic and Rodan, 1995:1193). By disseminating market intelligence, it is propagated, analysed and interpreted (Kogut and Zander, 1996:502). By responding to market intelligence, plans to capitalise on market intelligence are initiated, developed and capitalised on (D'Aveni, 1994).

- **KNOWLEDGE ACQUISITION AND LEARNING**

This builds new thinking, generates new knowledge and enhances existing resources (Zollo and Winter, 2002:339). It reflects the ability to learn by assimilating, transforming and exploiting existing knowledge resources to generate new knowledge (Cohen and Levinthal, 1990:128; Zahra and George, 2002:185). By assimilating knowledge, knowledge articulation and codification occurs (Zander and Kogut, 1995:76). By transforming knowledge new thinking is generated (Henderson and Cockburn, 1994:63), and brainstorming and experimentation (Pisano, 1994:85), innovative problem-solving (Iansiti and Clark, 1994:557; Kim, 1998:506) and variation (Zott, 2003:97) can take place. By exploiting knowledge new initiatives can be pursued (Van den Bosch et al.1999:551) and new solutions identified (Zott, 2003:97).

- **CO-ORDINATION AND REGULATION**

This helps to allocate resources, assign tasks and synchronise activities (Teece et al, 1997:509). By allocating resources the distribution and assigning of knowledge and resources can occur (Burgelman, 1994:24; Okhuysen and Eisenhardt, 2002:370). By assigning tasks the appointing of the right person to the right unit can take place (Eisenhardt and Brown, 1999:72). By synchronising activities the management of dependencies among resources and tasks to create new ways of performing a desired set of activities (Crowston, 1997:157; Malone and Crowstone, 1994:87) and the implementation of a set of complex activities by specifying the organisational principles by which individual knowledge is integrated (Grant, 1996:109) can occur.

For example, Eisenhardt and Sull (2001:107) have proposed the formulation of simple rules which regulate the flows of strategic processes and define desirable courses of action. Simple rules establish a strategic frame to help managers efficiently seize fleeting opportunities. These simple rules fall into five broad categories:

1. How-to rules – spell out key features of how a process is executed.
2. Boundary rules – delineate boundary conditions that help managers sort through many opportunities quickly and efficiently and focus managers on which opportunities can be pursued and which are outside the pale.
3. Priority Rules – help managers rank the accepted opportunities
4. Timing Rules – set the rhythm of key strategic processes and help synchronise the enterprise with the pace of emerging opportunities and other parts of the company; and co-ordinate the enterprises various parts in order to enable the seizing of opportunities in an efficient way.
5. Exit Rules – help managers decide when to pull out of previous opportunities.

- **ALIGNMENT AND INTEGRATION**

This helps to implement innovations by developing patterns of interaction. This is the ability to integrate disparate inputs through heedful contribution, representation, and subordination into a group system (Wieck and Roberts, 1993:357). By contribution the supply of individual input to the group outcome reflects the sharing individual knowledge (Okhuysen and Esenhardt, 2002:370) and the keeping of managers well informed (Brown and Eisenhardt: 1997, 1). By representation, the visualisation of how individuals fit in, how others act, and how their activities affect others (Crowston and Kammerer,1998:227) can take place. By subordination the reliance on the group system reflects the interrelationship of diverse inputs to execute a collective activity (Grant, 1996:109).

TABLE 1: A SUMMARY OF THE LITERATURE ON THE KEY DRIVERS OF RECONFIGURATION

SOURCE	ENVIRONMENT & OPPORTUNITY SENSING	KNOWLEDGE ACQUISITION & LEARNING	CO-ORDINATION & REGULATION	ALIGNMENT & INTEGRATION
Arthurs and Busenitz,2006	X	X	X	X
Branzei and Vertinsky, 2006	X	X	X	X
Brown and Eisenhardt, 1997		X	X	X
Burgelman, 1994		X	X	
Collis, 1994	X	X	X	X
Crowston and Kammerer, 1998			X	X
Danneels, 2002	X	X		
D'Aveni, 1994	X			
De Boer et al, 1999		X		X
Eisenhardt and Brown,1999	X		X	
Eisenhardt and Galunic,2000		X	X	X
Eisenhardt and Sull,2001			X	
Galunic and Eisenhardt,2001	X			X
Galunic and Rodan, 1998		X	X	
Garud and Nayyar,1994	X	X		X
Grant, 1996		X		X
Helfat and Raubitschek,2000				X
Henderson and Clark,1990		X		X

SOURCE	ENVIRONMENT & OPPORTUNITY SENSING	KNOWLEDGE ACQUISITION & LEARNING	CO-ORDINATION & REGULATION	ALIGNMENT & INTEGRATION
Henderson and Cockburn,1994		X		X
Hurley and Hult,1998	X	X		
Iansiti and Clark,1994	X	X	X	X
Kim,1998		X		
Knudsen and Madsen, 2002	X	X	X	X
King and Tucci,2002	X			X
Kogut and Zander,1996	X	X	X	X
Kylaheiko,Sandstrom and Virkkunen, 2002	X	X		
Lopez, 2005	X	X		X
Okhuysen and Eisenhardt,2002			X	X
Orlikowski,2002				X
Pisano,1994		X		X
Prahalad and Ramaswamy,2004	X	X	X	X
Raff,2000		X		
Teece et al,1997	X	X	X	X
Tsai,2001		X	X	
Weick and Roberts,1993	X			X
Wu, 2005	X		X	X
Zahra and George,2002	X	X		
Zander and Kogut,1995		X	X	
Zollo and Winter, 2002	X	X		
Zott,2003		X		

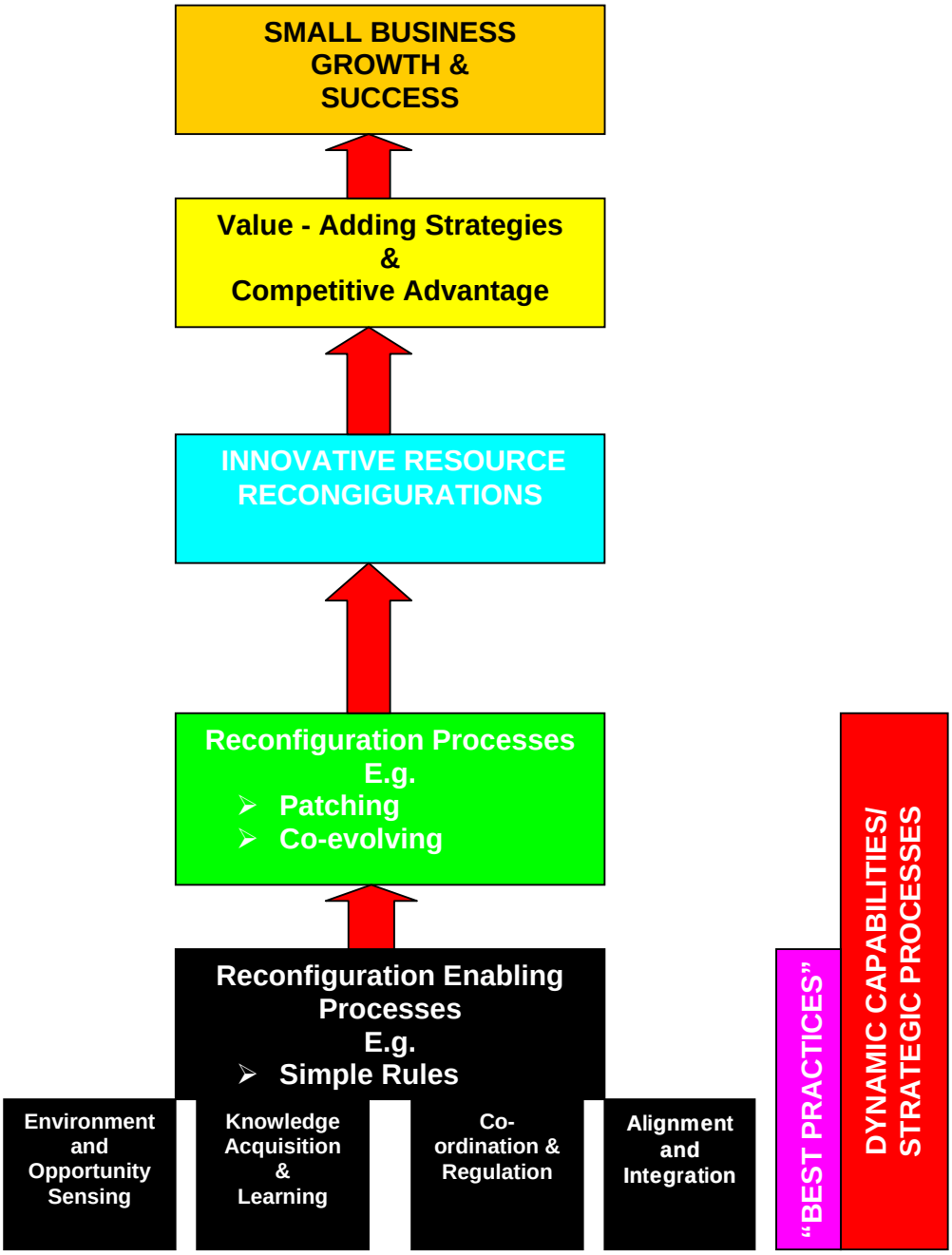

FIGURE 4: THE DRIVERS OF THE RECONFIGURATION PROCESS

Thus it can be seen that environment and opportunity sensing, knowledge acquisition and learning, co-ordination and regulation and alignment and integration are drivers of reconfiguration processes that lead to innovative resource reconfigurations and value-added strategies.

2.5.3 "BEST PRACTICES"

According to Arthurs and Busenowitz (2006:195), dynamic capabilities are primarily recursive in that they combine knowledge concerning the organisation's performance against its aspired level of performance in the market, along with the search for new strategic inputs and innovative reconfigurations that would permit the organisation to meet its performance expectations. The focal point of dynamic capabilities, they say, thus, fluctuates among an examination of external influencers of performance in the market, the target customer base, an examination of the organisations capabilities with regards to any potential competitors for the customer base and an examination of strategic factors for potential undervalued strategic inputs.

Variance in dynamic capabilities stems in part from a firm's accumulated experience, as prior choices support the development of distinct sets of resources and skills and/or may result in differential effectiveness at generating new value from extant endowments (Schultz, 2003: 440). Thus idiosyncrasies in dynamic capabilities trigger and sustain inter-firm performance differences (Eisenhardt and Martin, 2000: 1105).

While the dynamic capabilities of specific firms may be their unique and idiosyncratic processes, dynamic capabilities can also be common to and associated with effective and efficient processes across firms. These commonalities arise because there are better or less effective and efficient ways of dealing with the specific organisational challenges that needs to be addressed by a given capability i.e. there are "best practices" in the execution of dynamic capabilities (Eisenhardt and Martin, 2000: 1108).

Curteis (1997:269) has supported this by saying that those enterprises that have the ability to cope with volatility and change in the environment are normally more effective and efficient in their strategic activities. Eisenhardt and Martin (2000: 1113) have also stated that in high velocity markets dynamic capabilities may have detailed routines which help to ensure a fast, co-ordinated execution of complex details. Therefore this study defines " best practice " processes as those processes that enable an organisation to be more effective and efficient in their strategic activities by ensuring a fast, co-ordinated execution of complex details, and which are well established constructs

Following this logic, rather than attempting to build new constructs to conceptualise these processes, the literature was reviewed in order to obtain a

conceptual and theoretical starting point. This review of the literature shows no specific research on the dynamic capabilities or strategic processes of small businesses operating in turbulent environments. Nonetheless, documented systems of “best practices” for small business performance excellence were found in the Malcolm Baldrige National Quality Award criteria (Baldrige, 2004). These are existing, well-established and measurable constructs that capture the idea of dynamic capabilities and that are grounded in empirical research.

Through its core values and concepts: visionary leadership, customer-driven excellence, organizational and personal learning, valuing staff and partners, agility, focus on the future, managing for innovation, management by fact, social responsibility, focus on results and creating value, the Malcolm Baldrige National Quality Award criteria emphasises the earlier identified four key drivers of the reconfiguration process viz. environment and opportunity sensing, the acquisition of knowledge and learning, co-ordination and regulation as well as alignment and integration.

These key drivers are embodied in the seven categories of the Malcolm Baldrige National Quality Award criteria: 1) Leadership (125 pts.); 2) Strategic Planning (85 pts.); 3) Customer and Market Focus (80 pts.); 4) Information and Analysis (85 pts.); 5) Human Resource Focus (85 pts.); 6) Process Management (85 pts.) and 7) Business /Organizational Results (450 pts.) In addition the Baldrige Award has a small business category (Baldrige, 2004).

Therefore, since the Malcolm Baldrige National Quality Award criteria contains measurable constructs that capture the idea of the four key drivers of reconfiguration and that are grounded in empirical research, the Malcolm Baldrige National Quality Award criteria will be used as the basis for the questionnaire design in chapter 5. As is reported on in Chapter 5, the questionnaire will also incorporate the two specifically identified reconfiguration processes of “ patching “ and “ co-evolving”, the specifically identified reconfiguration enabling process of “ simple rules” as well as perspectives gained from the personal interviews conducted.

Since the literature review has indicated a dearth of material on the dynamic capabilities or strategic processes of small businesses operating in a turbulent environment, the use of a documented system of “best practices “for small business excellence will provide a comprehensive lens through which to view the dynamic capabilities or strategic processes of small businesses operating in a turbulent environment.

2.5.3.1 MALCOLM BALDRIGE NATIONAL QUALITY AWARD CRITERIA ["BEST PRACTICES"] AND THEIR LINKS WITH RECONFIGURATION PROCESS DRIVERS AND RECONFIGURATION ENABLING PROCESSES

The following is a summary of the 'best practices" derived from the Malcolm Baldrige National Quality Award criteria. Each "best practice" is reflected on the operational level as a strategic process in the small business operating in a turbulent environment. Each process is linked to the identified reconfiguration enabling processes of environment and opportunity sensing, the acquisition of knowledge and learning, co-ordination and regulation as well as alignment and integration.

TABLE 2: MALCOLM BALDRIGE NATIONAL QUALITY AWARD (MBNQA) CRITERIA AND THEIR LINKS WITH RECONFIGURATION PROCESS DRIVERS AND RECONFIGURATION ENABLING PROCESSES

MBNQA CATEGORY: LEADERSHIP AND STRATEGIC PLANNING This examines how the organization's senior leaders address values, directions, performance expectations, develops strategic objectives and action plans, deploys the chosen strategic objectives and action plans, focuses on customers and other stakeholders, deals with empowerment, innovation, and learning issues and measures progress. Also examined are the organization's governance and how the organization addresses its public, community, legal and ethical responsibilities.	
RECONFIGURATION ENABLING PROCESS	**RECONFIGURATION PROCESS DRIVER**
The leadership of small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organisation, when establishing organisational values, goals and performance expectations as well as when looking for business opportunities	Environment and Opportunity Sensing

The leadership of small businesses, through both formal and informal approaches fosters staff empowerment and innovation.	Alignment and Integration
The leadership of small businesses serve as role models for the organisation and all stakeholders. Their values and expectations of performance are communicated and reinforced among managers and throughout the entire workforce.	Alignment and Integration
The leadership of small businesses participates, encourages, supports, and recognizes involvement with their communities and professional associations to both support and strengthen them as well as the small business.	Environment and Opportunity Sensing
In its decision-making processes, the leadership of small businesses takes into account it's legal, ethical and risk requirements. By systematically addressing current and potential impacts in the decision-making processes, these become an integral part of performance management and improvement.	Environment and Opportunity Sensing
The leadership of small businesses is able to lead with an impelling strategic focus while allowing organizational members to be active players in the strategic process.	Alignment and Integration
The strategies that are developed are clearly translated into action plans that support the achievement of organizational objectives.	Co-ordination and Regulation

MBNQA CATEGORY: CUSTOMERS AND MARKETS

This examines how the organization determines requirements, expectations, and preferences of customers and markets. Also examined is how the organization builds relationships with customers and determines the key factors that lead to customer acquisition, satisfaction, loyalty and retention, and to business expansion.

RECONFIGURATION ENABLING PROCESS PROCESS	RECONFIGURATION PROCESS DRIVER
There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.	Alignment and Integration
A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analysed as a source of improvement activities.	Acquisition of Knowledge and Learning

MBNQA CATEGORY: MEASUREMENT, ANALYSIS AND KNOWLEDGE MANAGEMENT

This examines how the organization selects, gathers, analyzes, manages, and improves its data, information, and knowledge assets.

RECONFIGURATION ENABLING PROCESS PROCESS	RECONFIGURATION PROCESS DRIVER
The organization regularly measures and analyses organizational performance and provides the information and data to support the organisation's strategic planning process, as well as its operational and functional processes to enable continuous improvement.	Acquisition of Knowledge and Learning

A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs. Both formal and informal methods- such as surveys, exit interviews and tracking absenteeism and turnover – are used to determine employee well-being, satisfaction, and motivation.	Acquisition of Knowledge and Learning
The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business, and positive referral. Customer satisfaction measures are used to drive improvement and better understand the factors that drive markets.	Acquisition of Knowledge and Learning
Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.	Acquisition of Knowledge and Learning
Key performance measures embedded in the action plans and are used to systematically track progress towards meeting organizational strategies	Acquisition of Knowledge and Learning
Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information.	Acquisition of Knowledge and Learning

The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.	Acquisition of Knowledge and Learning
MBNQA CATEGORY: HUMAN RESOURCES This examines how the organization's work systems and employee learning and motivation enable employees to develop and utilize their full potential in alignment with there organization's overall objectives and action plans. Also examined are the organization's efforts to build and maintain a work environment and employee support climate conducive to performance excellence and to personal and organizational growth.	
RECONFIGURATION ENABLING PROCESS PROCESS	**RECONFIGURATION PROCESS DRIVER**
Key human resource plans are derived from and linked to the overall business strategy with respect to work design; employee development, education and training; compensation and benefits and recruitment.	Alignment and Integration
Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower people and further entrench the organizational culture. In addition, these work and job descriptions promote high performance and lead to flexibility and rapid response to the changing requirements of the marketplace.	Alignment and Integration
Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning objectives.	Alignment and Integration

Staff education, development and training activities are structured to balance organizational objectives with employee's individual knowledge and skills needs. The envisaged activities are jointly designed by the employees concerned and their managers detailing the specific needs, objectives and performance measures, clearly.	Alignment and Integration

MBNQA CATEGORY: PROCESS MANAGEMENT

This examines the key aspects of the organization's process management, including key product, service, and business processes for creating customer and organizational value and key support processes. This category encompasses all key processes and all work units.

RECONFIGURATION ENABLING PROCESS PROCESS	**RECONFIGURATION PROCESS DRIVER**
The design of key services and the service delivery process is addressed systematically, incorporating all stakeholders and accounting for changing customer requirements, the environment and technology.	Co-ordination and Regulation
The design of key services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.	Co-ordination and Regulation

MBNQA CATEGORY: BUSINESS RESULTS This examines the organization's performance and improvement in key business areas—customer satisfaction, product and service performance, financial and marketplace performance, human resource results, operational performance, and governance and social responsibility. Also examined are performance levels relative to those of competitors.	
RECONFIGURATION ENABLING PROCESS PROCESS	**RECONFIGURATION PROCESS DRIVER**
The small business captures trends and analyses key measures of: • operational and service performance such as productivity, cycle time, supplier and partner performance and other appropriate measures of effectiveness and efficiency. These results are compared against industry or best-in-class benchmarks. • regulatory compliance and environmental improvements. These results are compared against industry or best-in-class benchmarks. • financial performance, including aggregate measures of financial return and economic value added, return on investment, operating profit, pre-tax profit margin and/or market share and business growth as appropriate . These results are compared against industry or best-in-class benchmarks. • employee well-being, satisfaction, development, work-system improvement and effectiveness. These results are compared against industry or best-in-class benchmarks.	Acquisition of Knowledge and Learning

2.6 THE STRATEGIC PROCESSES OR DYNAMIC CAPABILITIES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

The MBNQA criteria, the specifically identified reconfiguration enabling process of "simple rules", the specifically identified reconfiguration processes of " patching" and co-evolving", together with the perspectives gained from the qualitative analysis [personal interviews] were incorporated into a questionnaire. This methodology is reported in Chapter 3. Following a rigorous expert panel evaluation and the validation and reliability testing procedures of a pilot study, the processes were refined and are reported in this section as the strategic processes of small businesses operating in a turbulent environment.

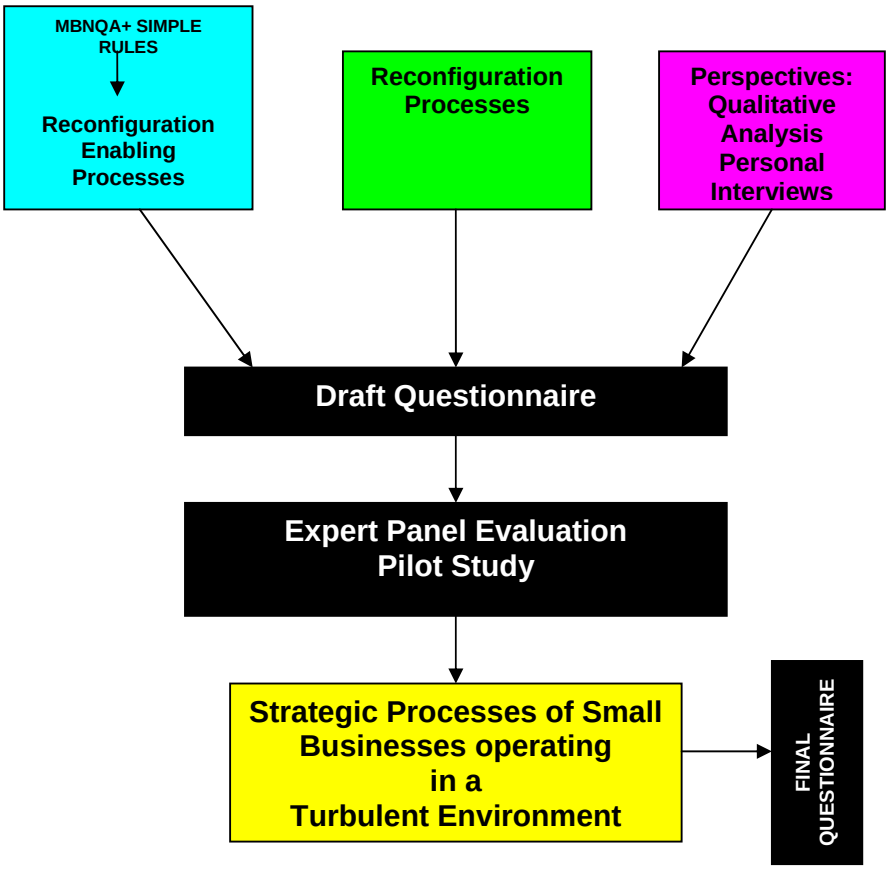

FIGURE 5: THE DERIVATION OF THE STRATEGIC PROCESSES OF SMALL BUSINESS OPERATING IN A TURBULENT ENVIRONMENT

This literature in this section will provide a justification from a literature viewpoint, for their inclusion in the proposed theoretical model which will be developed in Section 3. The literature under each process will also provide a motivation for the propositions developed following the proposition development methodology outlined in Chapter 3. Where possible, the common literature references that are used in support of different processes are cited under groups of processes, for the sake of efficient literature presentation. In other instances, the literature references are repeated.

Process 1

The leadership of a small business, through both formal [e.g. defined and structured] and informal [e.g. observation] methods, fosters staff empowerment and innovation.

As described in the literature earlier in this chapter, a key characteristic of small firms is its flat structure. While a flattened hierarchy should be enabling to employee empowerment (Holbeche, 1994), Powell (2002:59) has cautioned that flatter structures may well promote the image of empowerment at the expense of the actual practice of empowerment. Wilkinson (1999:208) has also described a “bleak house“scenario of small firms that are dictatorially run with employees who have very little involvement in the running of the business.

Beaver and Jennings (2005: 12), have also stated that in small firms appointment and promotion are often made on the basis of birth or personal friendship and where the relationships between the leadership and the operating personnel are often informal with no precise definition of rights and obligations and duties and responsibilities.

Thus, it can be seen that in these small businesses, process 1 has a low level of importance and a low extent of implementation.

Process 2

The leadership of a small business allows the business to co-evolve by fostering, driving and executing multi-business/multi-unit collaborative linkages and managing group dynamics while at the same time empowering staff.

A reconfiguration process identified in Chapter 2, is the process of co-evolving. Eisenhardt and Galunic (2000:91) have stated that with coevolving, multi-business teams (the heads of individual businesses working together) drive synergies by

reconnecting the collaborative links among businesses as markets and businesses evolve. Their key skill is managing their own group dynamics. The important aspects of coevolving described are:

- Form of collaboration – the shifting webs among evolving businesses.
- Objectives – growth, agility and economies of scope.
- Internal dynamics – collaboration and competition.
- Focus – the content and the number of collaborative links
- Corporate role – to set collaborative context.
- Business role – to drive and execute collaboration.
- Incentive – self-interest, based on individual business-unit performance, not collaboration.
- Business metrics – performance against competitors in growth, share and profits.

Sekulie (2002: 73) has also described co-evolving as a subtle strategic process which includes the creation of a flexible business portfolio with both collaborative and competitive units and a superior corporate strategy based on cross-business synergies in performing business activities. As the ability of two or more business units to generate greater value working together that could apart, synergy has its sources in shared resources, knowledge and skills, co-ordinated strategies, vertical integration and establishing internal alliances in the enterprise.

However, in the small enterprise, the managerial process is characterised by the highly personalised preferences, prejudices and attitudes of the firm's owner/manager, to whom a key challenge is to learn how to delegate while simultaneously creating a team-like environment within the company (Mazzarol, 2003 : 30).

Research has also shown that the leadership of small businesses need to be in control of the organisation (Malone, 2004:17; Miller and Simmons, 1992:31). In addition, these leaders have been shown to have authoritarian (Birley, 1986:36) and paternalistic (Dyer, 1988:37) characteristics. Hence, they adopt leadership styles and management systems that allow them to centralise power and control as well as decision-making (Dyer, 1988:37; Longnecker and Schoen, 1997:1; Mintzberg, 1984:207 and Seymour, 1993:263).

Furthermore, in these small businesses, where power centralization is prevalent Beaver and Jennings, 2005:14), there may be a low level of importance and a low extent of implementation for process 2.

Process 3

Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower staff and further entrench the organizational culture.

The earlier discussions have shown that leadership of small businesses have autocratic and paternalistic tendencies and the tendency to micro-manage is prevalent in these firms. Malone (2004:17) has also emphasised that a strong ego is a common trait in the leadership of small businesses. This trait may also reduce co-operation, initiative and innovation. In addition, it may also disempower staff.

Mazzarol (2003 :28) has highlighted the importance of small business leadership " learning to let go" and cited some of the risks of micro-management disempowerment and failure to get the best out of staff. Furthermore, Beaver and Jennings (2005:12), have also pointed out that in small businesses relationships are often informal with no precise definition of rights and responsibilities and duties and obligations.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 3.

Process 4

Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.

Process 9

Key human resource plans are derived from and linked to the overall business strategy with respect to compensation, benefits and recruitment.

According to Kerr and McDougall (1999:65), small businesses do not derive their development, education and training provided for employees from their overall business strategy. In addition, few small businesses actually assess and evaluate the effectiveness of any of the training, education and development provided. Their human resource plans are often piece meal, ad *hoc,* and lack cohesion. Webster, Waller and Brown (2005:552) have supported this by saying that in small

businesses informal transfer of skills and knowledge between individuals occurs. Furthermore, Beaver and Jennings (2005:12), have also pointed out that in small businesses relationships are often informal with no precise definition of rights and responsibilities and duties and obligations.

Hendry *et al* (1991) have suggested that training and learning in small businesses is often *ad hoc*, occurring in the course of normal routines. Other researchers have reported that managers of small firms they do not consider the use of generally accepted HRM practices as essential for improving productivity as they lack training in formal personnel management practices (Amba-Rao and Pendse, 1985: 19; Mc Evoy, 1984: 1).

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for processes 4 and 9.

Process 5

The skills, knowledge, values and attitudes of the staff and leadership are important, relevant, valuable and available to customers.

Andriechuk (1992:28) has said that since small businesses have fewer employees, these employees handle a broad set of responsibilities. Moreover, small firms have a natural tendency to cross-functional training because they have fewer layers of management and staff (Axland, 1992:29. Thus, the employee is asked to do more and job specialization and specialist knowledge acquisition is not facilitated. This may result in important, relevant and available skills and knowledge not being available to customers.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 5.

Process 6

A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.

Recruiting, motivating and retaining employees are some of the biggest problems for small firms (Hornsby and Kuratko, 1990:9; Mathis and Jackson, 1991; Ghobadian and Gallear, 1996: 83). Job meaningfulness is closely linked with motivation through challenge and self expression (Powell, 2002:57). However, in the small firm, the owner perceives the business as an extension of his or her own personality. Consequently, there is little room of the employee's self expression.

Research has also shown that the leadership of small businesses need to be in control of the organisation (Malone, 2004:17; Miller and Simmons, 1992:31). In addition, these leaders have been shown to have authoritarian (Birley, 1986:36) and paternalistic (Dyer, 1988:37) characteristics. Hence, they adopt leadership styles and management systems that allow them to centralise power and control as well as decision-making (Dyer, 1988:37; Longnecker and Schoen, 1997:1; Mintzberg, 1984:207 and Seymour, 1993:263).

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 6.

Process 7

Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information

Small firms tend to focus their selection and use of data on internal operational process issues (Neely et al, 1994: 140), thus the usefulness of the information collected is only of limited scope to employees and stakeholders.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 7.

Process 8

The leadership of a small business leads with an impelling strategic focus while allowing and rewarding organizational members for being active players in the strategic process. While staff are encouraged and rewarded for experimenting, taking risks and being creative, the small business leadership at the same time retains control of the overall goals of the firm.

Hart (1992:327) pointed out that, top managers must lead with an impelling strategic focus while allowing organisational members to be active players in the strategic process. When managers and organisational members acquire this complex pattern of co-ordination, they have achieved a resource that is difficult to comprehend and imitate by their competitors, turbulent environments.

These findings are supported by Lumpkin and Dess (1995:1386) who investigated the relationship between simplistic strategic decision processes and organisational performance as moderated by the environment and stage of organisational development and found that firms facing dynamic environments need complex decision processes. A complex strategic decision process involves all mangers and utilizes all organisation members' skills and abilities providing a firm with a strategic resource that is difficult to imitate (Grant, 1991:114).

This view is also emphasised by Snyman and Drew (2003:293) who investigated the relationship between complexity as a strategic decision process and firm performance. They found that in hyper-competitive environments, where change is rapid and ambiguous, firms need more than just rational or incremental strategic decision processes. Complex processes were found to be significantly related to higher firm performance than were simpler, unitary or impoverished strategic decision processes. A complex strategic decision process involves all mangers and utilizes all organisation members' skills and abilities providing a firm with a strategic resource that is difficult to imitate (Grant, 1991:114).

However, in the small enterprise, the managerial process is characterised by the highly personalised preferences, prejudices and attitudes of the firm's owner/manager, to whom a key challenge is to learn how to delegate while simultaneously creating a team-like environment within the company (Mazzarol, : 30).

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and paternalistic (Dyer, 1988:37) characteristics. Hence, they adopt leadership styles and management systems that allow them to centralise power and control as well as decision-making (Dyer, 1988:37; Longnecker and Schoen, 1997:1; Mintzberg, 1984:207 and Seymour, 1993:263).

Furthermore, in these small businesses, where power centralization is prevalent (Beaver and Jennings, 2005:14), there may be a low level of importance and a low extent of implementation for process 8.

Process 10

Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.

Andriechuk (1992:28) found that since small businesses have fewer employees, these employees handle a broad set of responsibilities. Thus it can be seen that the job descriptions are generally much broader at small firms. In the small firm, the employee is asked to do more and therefore more opportunities exist for the employee to gain greater experience in a broad variety of jobs and tasks. The problem that is encountered here is that this broad tasking comes with a price. But the fewer resources of small businesses allow less compensation which in turn leads to higher staff turnover. Recruiting, motivating and retaining employees are some of the biggest problems for small firms (Hornsby and Kuratko, 1990:9; Mathis and Jackson, 1991; Ghobadian and Gallear, 1996: 83). Higher staff turnover rates compromise learning and experience and this hinders both communication and skill sharing.

In smaller firms compensation in terms of salary and benefits do not usually compare with those in larger firms (Lichtenstein, 1998:55). In addition, small business managers do not see incentives as essential to the improvement of productivity (Amba-Rao and Pendse, 1985:19). Thus small firms do not rely on compensation packages to reinforce performance and teamwork and therefore these firms may have to use other recognition programs to do so.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 10.

Process 11

The leadership of a small business serves as a role model for the organisation and all stakeholders.

O'Gorman, Bourke and Murray (2005:1) have stated that small size is generally associated with greater interpersonal contact among groups and greater informality in communication patterns; and according to Lee and Oakes (1995:413), the simple structure and systems present in small businesses enables the leadership of small businesses to inspire and motivate others in the organisation.

However, in the small enterprise, the managerial process is characterised by the highly personalised preferences, prejudices and attitudes of the firm's owner/manager, to whom a key challenge is to learn how to delegate while simultaneously creating a team-like environment within the company (Mazzarol, 2003: 30).

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Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 11.

Process 12

The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.

According to Eisenhardt and Sull (2001:107), a key aspect of strategy in turbulent environments is that while each company should follow a disciplined and consistent strategy - otherwise it would be paralysed by chaos - it is more important to focus on a unique set of strategically significant processes and a handful of rules to guide them. A consistent strategy helps managers rapidly sort through all kinds of opportunities and gain short-term advantage by exploiting the attractive ones. Rather than picking a position or leveraging a competence, managers should select a few key strategic processes and develop simple rules to shape the process. Rather than responding to a complicated world with elaborate strategies, they should craft a handful of simple rules.

These simple rules fall into five broad categories:

1. How-to rules – these spell out key features of how a process is executed- "what makes our process unique?"
2. Boundary rules – they focus managers on which opportunities can be pursued and which are outside the pale.
3. Priority Rules –they help managers rank the accepted opportunities
4. Timing Rules – they synchronise managers with the pace of emerging opportunities and other parts of the company.
5. Exit Rules – they help managers decide when to pull out of yesterday's opportunities. These simple rules are not broad, mindless, vague or stale.

In turbulent environments, small firms are less likely to increase their strategic initiatives (Lindsay and Rue, 1980: 385) as they are constrained by their lack of resources and their range of strategic options (Dandrige, 1979: 53; Robinson and Pearce, 1984: 80). Thus, they are particularly vulnerable when coping with the speed of economic, industry, and competitive change (Drozdow and Carroll, 1997:75). Another reason why small firms are generally considered more vulnerable to competitive challenges is that they spend more time adjusting and reacting rather than predicting and controlling the business environment (D'Amboise and Muldowney, 1988:226). They are also generally characterized as

having a myopic view of management that focuses mainly on meeting day-to day survival challenges which can be attributed partly to the lack of understanding of the leadership to the strategic aspect of business and partly to the lack of resources (Ahire, 1996:44). It is also suggested that small firms lack the necessary staff and time to engage in strategic planning, and generally do not plan (Robinson and Pearce, 1984:80). Scully and Fawcett (1994: 39) have supported this view, and state that any change that occurs in the small firm is likely to be incremental without any stakeholder-focused assessment and hence the small firms generally fail to develop any true strategic initiatives.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 12.

Process 13

The leadership of a small business ensures that the design of key services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.

While the notion of stakeholder importance is supported to some extent by small firm leaders, decision-making may be based on incomplete or biased input. Important viewpoints may be overlooked as some important stakeholders may be ignored and dependence developed on stakeholders who may have been developed and maintained by these small business leaders. Furthermore, White and Wilson (1988) have found that at the smaller firm process activities were strongly systematized. Such systems strengthen the command and control environment that is typically found in small firms.

Thus it can be seen that small businesses are focused on day to day operations and their leadership does not favour an all-inclusive stakeholder approach. This may lead to incomplete or biased decision- making when designing key services.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 13.

Process 14

The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available.

One of these newly defined strategic processes is patching (Eisenhardt and Brown, 1999:72). When markets are turbulent, patching becomes crucial. Patching is the strategic process by which corporate executives routinely remap business to changing markets. While managers in traditional companies see structure as mostly stable, managers in companies that patch believe structure is inherently temporary. Patchers also develop corporate strategy differently. Traditional managers set corporate strategy first, whereas managers who patch keep the organisation focused on the right overall set of business opportunities and then let strategy emerge from individual businesses. Patching changes are usually small in scale and made frequently and quickly – think evolution not revolution.

For patching to work, the company's infrastructure must support the process. This requires modularity, detailed and complete business-level metrics. Modularity enables a patching company's business units to be focused and discrete so that they can be combined seamlessly. Complete and detailed business-level metrics that are comparable across boundaries are also essential for effective patching. Such metrics and their trends give corporate managers in-depth knowledge of their businesses and can help them predict how and when to re-patch.

Great patching executives all possess one critical skill: pattern recognition. They can see trends developing in the marketplace before most other people can. More significant, they have a deep understanding of two concrete aspects of managing: market segmentation, which reveals how to optimally configure patches to exploit market opportunities, and road maps for new products, services or technologies which suggest how future patches are likely to evolve. This understanding of patching was made after more than a decade of research into reasons behind corporate success in high-velocity, intensely competitive industries.

The aspects of patching are:

- modularity
- detailed and complete business-level metrics.
- pattern recognition
- market segmentation
- road maps.

In turbulent environments, small firms are less likely to increase their strategic initiatives (Lindsay and Rue, 1980: 385) as they are constrained by their lack of resources and their range of strategic options (Dandrige, 1979: 53; Robinson and Pearce, 1984: 80). Thus, they are particularly vulnerable when coping with the speed of economic, industry, and competitive change (Drozdow and Carroll, 1997:75). Another reason why small firms are generally considered more vulnerable to competitive challenges is that they spend more time adjusting and reacting rather than predicting and controlling the business environment (D'Amboise and Muldowney, 1988:226). They are also generally characterized as having a myopic view of management that focuses mainly on meeting day-to day survival challenges which can be attributed partly to the lack of understanding of the leadership to the strategic aspect of business and partly to the lack of resources (Ahire, 1996:44). It is also suggested that small firms lack the necessary staff and time to engage in strategic planning, and generally do not plan (Robinson and Pearce, 1984:80). Scully and Fawcett (1994: 39) have supported this view, and state that any change that occurs in the small firm is likely to be incremental without any stakeholder-focused assessment and hence the small firms generally fail to develop any true strategic initiatives.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 14.

Process 15

The leadership of a small business develops strategies that are clearly translated into action plans that support the achievement of organizational objectives.

Process 19

The organization regularly measures and analyses organizational performance to provide the information and data to support the organization's strategic planning process, as well as its operational and functional processes to enable continuous improvement.

Process 20

Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.

Process 21

Key performance measures embedded in the action plans and are used to systematically track progress towards meeting organizational strategies.

Process 28

The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business and positive referral.

Since in small businesses there is no margin of error, no-one to blame mistakes on and no-one to ask for resources(Brady 1995: 44) key performance measures are seen as time and resource consuming and considered unnecessary. Consequently, the tracking of progress towards meeting action plans is seen as unnecessary in the small firm.

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Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for processes 15, 19,20,21 and 28.

Process 16

The leadership of a small business knows what resources [e.g. human, financial, physical, support] are available to the business; their constraints, their capacities and their advantages.

Process 17

The leadership of a small business devises appropriate strategies that can maximize any resource advantage and overcome any resource limitation.

Surveys of small business failure have showed that while entrepreneurs often have good ideas and are competent they “do not have a clue on how to run a business and have no underlying appreciation of business fundamentals” (Barron, 2000:1; Brink, 1997:364). Ligthelm and Cant (2002:1) have found that deficiencies in its internal environment are the major cause of small and medium enterprise failures, and revolve around poor management skills. The failure of small businesses has also been attributed to resource limitations (Wilkes and Dale, 1998:731; Shin et al, 1998:10; Ahire and Gohar, 1996:1 and Welsh and While: 18).

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for processes 16 and 17.

Process 18

The leadership of small businesses ensures that personalized service is offered to customers

Process 24

There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.

Process 25

A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analyzed as a source of improvement activities.

Process 26

Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.

Process 27

The design of key services and the service delivery process is addressed systematically accounting for changing customer requirements.

Andriechuk (1992:28) found that since small businesses have fewer employees, these employees handle a broad set of responsibilities. Thus it can be seen that the job descriptions are generally much broader at small firms. Thus, employees may have very little time to offer customers a personalised service.

Furthermore, according to Kerr and McDougall (1999:65), small businesses do not derive their development, education and training provided for employees from their overall business strategy. In addition, few small businesses actually assess and evaluate the effectiveness of any of the training, education and development provided. Thus, the education and training of employees may be inadequate to offer customers a personalised service.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 18, 24, 25, 26 and 27.

Process 22

The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.

Assessing company performance relative to plans and goals may be a moot point for many small firms since these firms tend to not develop formal strategy and plans (as per previous discussion). In general, small firms may have certain financial goals in mind but rarely does the small firm have the time or resources to collect the data in order to analyse the overall performance of the company. Small firms will review the performance of key process measures but formal goals are not set for these processes.

Furthermore, research suggests that although firms may appreciate the potential strategic value of competitor information, they generally make little systematic attempt to collect or maintain such data (Fann and Smeltzer, 1989: 35). Often, the direct competitor of a small firm is another small firm and research has shown that it is difficult to collect competitive information held internal to such an organization because these firms being privately held make information difficult to obtain (Hewitt-Dundas et al, 1997: 76).

Goh and Ridgeway (1994: 54) have pointed out that the majority of the small firms either conduct only limited comparisons with their competitors or just monitor trends within their own firm. The firms tend to be very inward-looking and are satisfied so long as they are performing better than their neighbouring competitors. They have not realized the importance of benchmarking and the advantages it holds for their company. Ebrahimpour and Withers (1992: 142) have found that quality tracking techniques such as benchmarking may also be used less frequently and less effectively in small firms.

However, Beal (2000: 27) has found that collecting information on how competitors interact with the external environment can be an important source of information about competitors for the small firm. Wiarda and Luria (1998: 91) have also pointed out that the collection and analysis of performance data is of low priority to small firms who have few resources to do in-depth work in this area.

Thus small firms tend to be very inward-looking and are content so long as they are performing better than their neighbouring competitors. In many cases, the direct rival of a small firm is another small firm and research has shown that it is difficult to collect competitive information held internal to the company because the

majority of these firms are privately held and information is not easily obtained. These firms do not realise the advantages of benchmarking and the advantages it holds for their firm. In addition small firms make little effort to collect or maintain data about their competitors.
Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 22.

Process 23
All measures of organizational performance captured by the small business are compared against industry or best-in-class benchmarks.

Goh and Ridgeway (1994: 54) have found that small firms were unaware of the need to maintain detailed and accurate records. Ebrahimpour and Withers (1992: 142) have also reported that quality tracking techniques such as benchmarking may also be used less frequently and less effectively in small firms.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 23.

Process 29
The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities,

Research has shown that the leadership of small businesses need to be in control of the organisation (Malone, 2004:17; Miller and Simmons, 1992:31). In addition, these leaders have been shown to have authoritarian (Birley, 1986:36) and paternalistic (Dyer, 1988:37) characteristics. Hence, they adopt leadership styles and management systems that allow them to centralise power and control as well as decision-making (Dyer, 1988:37; Longnecker and Schoen, 1997:1; Mintzberg, 1984:207 and Seymour, 1993:263).

Because the leadership of small firms faces fewer organisational constraints than those in larger firms, their decisions can have proportionately larger and more immediate impacts on the business (Haveman, 1993:864; Norburn and Birley, 1988:225). Thus, these leaders know that just one poor decision can seriously

threaten the existence of their organisation. As a result of this pressure the leadership of small firms tends to be more conservative or risk averse in their decisions and rely heavily upon themselves for final decisions involving all aspects of the business.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 29.

Process 30

The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.

Process 31

The leadership of a small business has strong friend, family and professional networks.

According to Williamson (1985) economic functions can be performed either within the boundaries of hierarchical firms (within the organisation) or by market processes that cross these hierarchical boundaries. For small firms, the economic functions and transactions within the boundaries of hierarchical firms are either impossible or extremely difficult because small firms, being small and alone, are inherently lacking in resources, causing higher costs. Hence it is clear that small firms find it difficult to perform their economic activities either at the level of the hierarchical firm or the market.

Given this, small firms need support in order to compete and survive. Networking is one of the best solutions given in the literature for the development of small firms in developing countries, because networking lies between the hierarchy and the market (Jarillo, 1988:31; Thorelli, 1986:37). Hierarchies and markets are regarded as being the polar ends of a variety of governance options (Butler, 1991; Williamson, 1985).

In the network, the logic of exchange differs from the economic logic of the market and the hierarchy. The logic of exchange is considered as “social embeddedness” because on going social ties shape actor expectations and opportunities in ways that differ from the economic logic of market behaviour (Granovetter, 1985:481; Uzzi, 1996:674). Butler and Hansen (1991:1) and Birley (1985: 107) have also pointed out that both broad and inter-firm strategic networks provide successful start-up and competitive advantage for small enterprises. Donckels and

Lambrecht (1995:273) have also highlighted a positive relationship between network formalities and small business growth.

Thus it is seen that networking is the best solution for small firm development (Donckels and Lamprecht, 1995:273; Gibb, 1993:1; Johannisson, 1990:32, Szarka, 1990:10).

Ostgaard and Birley (1996:37) have described networking as an entrepreneurial process that involves the gathering of scarce resources from the environment. These resources include not only finance and other material resources, but also information, ideas, advice, customers, etc. and are usually obtained through the entrepreneur's personal network. A network provides the entrepreneur with information, support, contact and credibility.

Studies done by Donckels and Lambrecht (1995: 273) identified external consultants, seminars, trade fairs, contact with other entrepreneurs and discussions with relatives as sources of network formation. Dodd (1997: 80) also points out that one of the most efficient ways for a manager or a business owner to establish an external network of personal ties is through membership of various clubs, societies and associations.

Discussions with relatives and friends are also a major element of the formation of networks and also have a strong impact on business performance, particularly in small businesses (Aldrich, Rosen and Woodward, 1986: 154; Dodd, 1997:80).

Since owners/managers of small firms do not have adequate managerial and technical skills to run their business efficiently and effectively (Holmlund and Kock, 1998:46 and Joyce et al, 1995:1) small firms regularly use external researchers or consultants to enhance the skills of their internal staff (Brysen et al, 1993:265).

Thus it can be seen that by participating in networks, small firms are able to overcome some of their resource limitations and growth is fostered; and furthermore this network participation is of mutual benefit to both the small firm and the professional and community associations.

Thus, it can be seen that in these small firms there may be a high level of importance and a high level of implementation for processes 30 and 31.

Process 32

The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes

The legal requirements imposed on small businesses can create barriers or drive existing firms from the industry. According to Reilland (1999:18), the cost of complying with regulations consumes a much higher share of sales revenues for small and medium sized companies, than for larger enterprises". The small business has to take these issues under serious consideration when making decisions because the impact could seriously threaten the existence of the business.

Vyakarnam *et al* (1997:1625) have discussed small business ethics and point out the inherent conflict within owner managed businesses in terms of separating out the rights of the owner from those of the business, when they may be perceived as the same entity. The personal characteristics of the owner manager and particularly the extent to which they can detach themselves from the business and its various stakeholders have an impact on the firm's outward social responsibility. It therefore seems clear that in smaller firms the personal ethics of the owner/manager will be the significant driving force that leads toward socially responsible or irresponsible actions.

Small businesses consider issues of legal, ethical and risk requirement seriously when making decisions because their impact could seriously threaten the existence of the business. Small firms that ignore such issues usually do not survive. However, it can be seen that small firm management can be conflicted by their legal and ethical commitments if the distinction between self interest and business interest becomes blurred. In addition, the perceived overburden of policies, laws and regulations alienates these managers and while they will usually meet the minimum requirements, they usually do not find competitive advantage through treating these issues as areas for potential improvement.

Thus, it can be seen that in these small firms there may be a low level of importance and a low level of implementation for process 32.

2.7 THE IMPORTANCE OF THE STUDY FOR THE PRACTICE ENVIRONMENT: SMALL BUSINESSES

This study aims to develop a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. This model will differentiate dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer-term strategy of altering the general resource base of these small firms. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments, optimized.

Since it is the owner/managers' decision-making perceptions that govern their behaviour through various stages of the decision-making process (Tait, 1990:38), the level of importance assigned by the owner/manager to a particular process will determine the resources to be allocated to it and hence the extent of implementation of a particular process and the extent of innovative resource reconfigurations that revolve around it. This is supported by Adner and Helfat (2003: 1011) who state that managerial decisions are acknowledged as some of the most critical antecedents of capability transformation. Helfat and Peteraf (2003:1004) also state that " unless the external selection environment is so constraining that it limits managers to only one possible option, different managers in different firms may make different choices ".

Suitable strategic choices can help firms overcome the constraints of their existing resource endowments by guiding the development of extant skills and by facilitating the emergence of new capabilities. These strategic manoeuvres can modify a firm's current capability- development trajectory by influencing the range and depth of external cues noticed the framing of these stimuli as threats or opportunities for action, a firm's speed of reaction, and/or the specific actions taken in response (Branzei and Vertinsky, 2006:75).

Furthermore, Kozan, Oksoy and Ozsoy (2006:114) have also found that small business growth was positively influenced by owner intensity, a construct of which, importance placed on activity is a component. Korman (1970: 31) also describes the theory of work motivation which states that people will be motivated to behave

and perform in a manner that is consistent with their self-concept. In other words, the importance that a person places on a skill affects that person's behaviour.
Thus the choices and decisions made by small businesses on how they allocate their resources to strategic processes, determines the type and extent of innovative resource reconfigurations that can occur in these small firms.

Attempting to increase the importance about specific dynamic capabilities, through increasing management capabilities is a shorter term and more focused task than attempting to alleviate the general resource impoverishment of these small firms.

Furthermore, the short-term intervention of improving management capability in small firms that operate in a turbulent environment will enhance the ability of small firms to grow their firm's resource base. Kozan, Oksoy and Ozsoy (2006:114) state that by improving management know-how, the resource aggregation capability of the small firm is improved. Thus, the alleviation of the impoverishment of management capability in a small business operating in a turbulent environment has dual benefits. An increase in management capability benefits business success and the resource base of the firm. An increase in the resource base in turn benefits business success and since management capability is also a resource of the firm, it also benefits management capability.

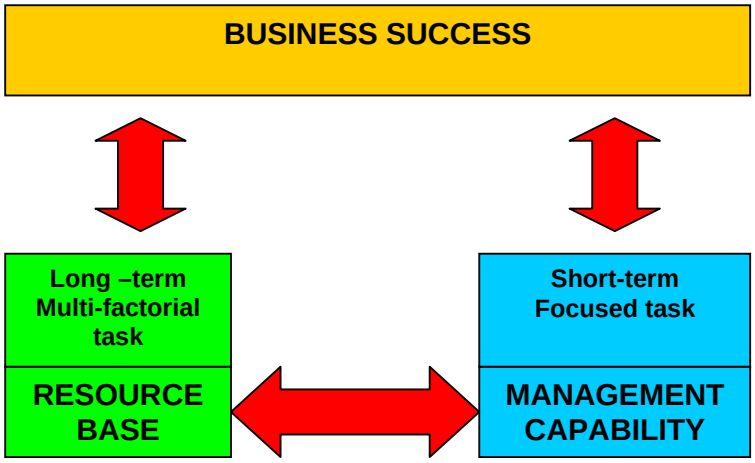


FIGURE 6: THE LINK BETWEEN MANAGEMENT CAPABILITY, RESOURCES AND BUSINESS SUCCESS

Because of the resource impoverishment of small businesses operating in a turbulent environment, it is important that their resources be used efficiently and effectively. Thus in seeking to enhance and increase management capabilities, it is important to be able to identify the specific areas in which management

capability should be enhanced. From the literature review in this chapter, it is clear that the areas that should be focused on are the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment. Dynamic capabilities are a business asset of the highest order (Lopez, 2005:661) and also according to Wu (2005), for firms facing a changing environment, strengthening dynamic capabilities is a key concern. Thus this study's general findings focus on the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment. On a more specific level, the study's findings specifically focus on those strategic processes whose implementation can be altered by changing their level of importance and by extension by changing management capability, in these small businesses.

From this study's findings the small business management practitioner, will be able to identify the dynamic capabilities about which more knowledge is required. By increasing management capabilities in this regard, the general resource base of these small firms will also be increased and thus following from the logic of the earlier discussion, the dynamic capabilities of these small firms will be strengthened, leading to innovative resource reconfigurations.

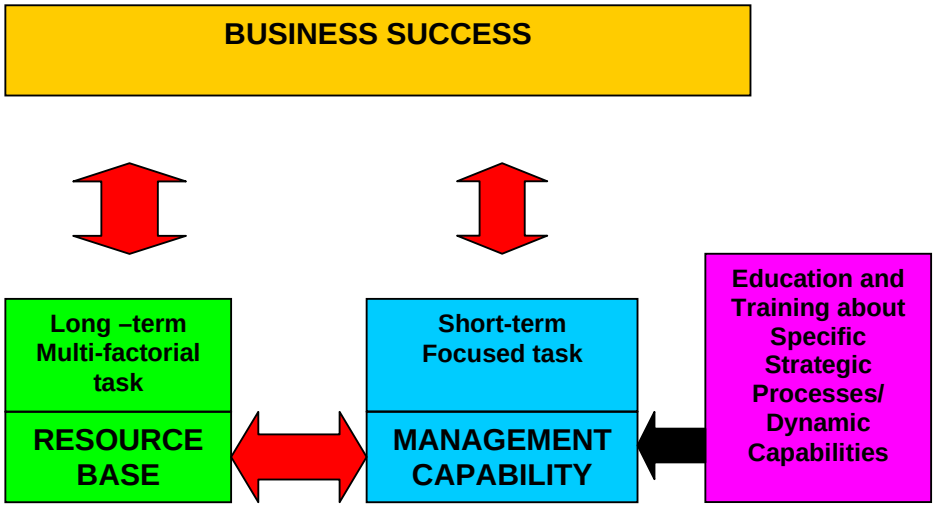


FIGURE 7: THE LINK BETWEEN STRATEGIC PROCESSES, MANAGEMENT CAPABILITY, RESOURCES AND BUSINESS SUCCESS

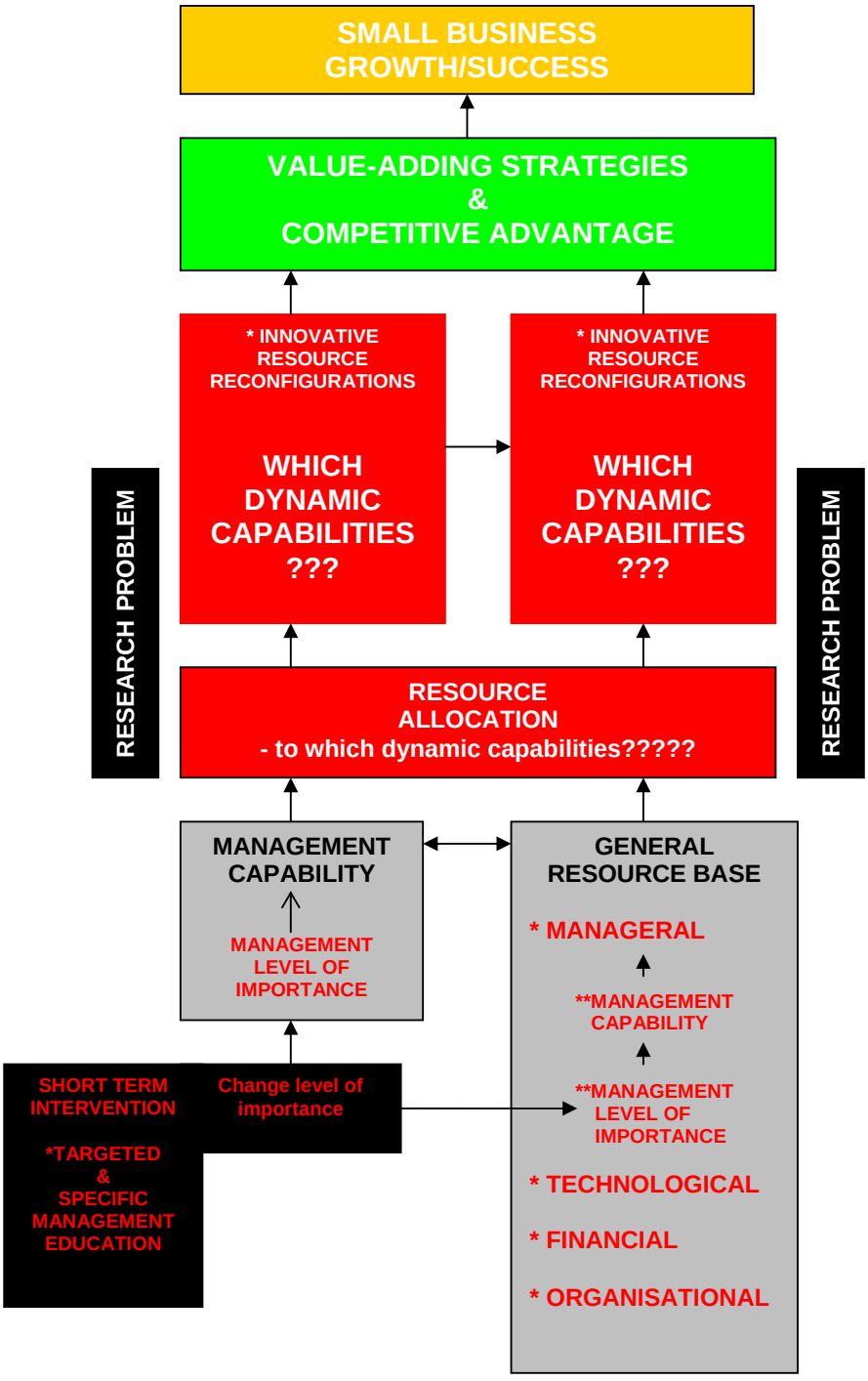


FIGURE 8: **LONG TERM AND SHORT TERM INTERVENTION MECHANISMS FOR INNOVATIVE RESOURCE RECONFIGURATIONS.**

2.8 THE IMPORTANCE OF THE STUDY FOR SMALL BUSINESS THEORY AND GENERAL MANAGEMENT THEORY

The literature review in this chapter reveals a paucity of research on the strategic processes in small businesses operating in a turbulent environment. Current literature and research in dynamic capabilities occurs in large organisations. Furthermore, although much of the literature on dynamic capabilities argues that they are rooted in organisational processes, the nature of these foundational processes have not received much attention, generally in dynamic capabilities literature and specifically none at all in the literature on small businesses. Thus this study's differentiation of dynamic capabilities into the two constructs of reconfiguration enabling processes and reconfiguration processes provides clarity about the domain and the conceptualization of dynamic capabilities.

In addition, this study's conceptualisation and measurement of dynamic capabilities as a specific set of measurable strategic processes that capture the idea of dynamic capabilities, provides a theoretical basis for the link between the reconfiguration enabling processes and the reconfiguration processes that lead to innovative resource reconfigurations. This provides clarity about the content and operationalisation of dynamic capabilities.

In areas where there is a paucity of research and literature, theory building is important as it provides the creation of frameworks that can explain practical phenomena. Theories advance our knowledge by proposing particular concepts that classify and describe a phenomenon. They also offer a set of interrelated statements using these concepts. Theories are not absolute laws; they are always tentative and are based on probabilities of events occurring.

Using Dubin's theory building method (Dubin, 1978), this study will build and develop the theory of strategic processes of small businesses operating in a turbulent environment by first proposing a theoretical model and then by developing this model through an empirical testing of its key indicators. This theory building process and theoretical model is reported on in Chapter 3.

2.9 THE CHOICE OF SECTOR TO MODEL THE STRATEGIC PROCESSES OF SMALL BUSINESSES OPERATING IN TURBULENT ENVIRONMENTS

A sector that is experiencing environmental turbulence is the retail community pharmacy sector.

While government intervention, through the means of policies, regulations etc., is an important mechanism to address the failure of pharmaceutical markets (WHO, 1997); its intervention in the supply and distribution of medicines in South Africa, has created unprecedented turbulence in the environment of the pharmaceutical industry.

With the advent of democracy in South Africa, the government introduced the South African National Drug Policy. The cornerstone of the South African National Drug Policy (RSA, 1995) is affordable access to drugs. Access to drugs is an integral part of the realization of a fundamental human right – the right to health (Velasquez and Boulet, 1999). With the cost of pharmaceuticals comprising a large slice of the healthcare bill; and with the accessibility, safety, efficacy and quality of drugs being part of the health objectives of the South African National Drug Policy (RSA, 1995) and cost-effective rational drug use being part of its economic objectives; the industry is experiencing a range of legislative changes designed to maximise the value provided by drug therapy.

The proposals for and implementation of this wide range of legislation, in the form of acts and regulations such as the Pharmacy Act, the Medical Schemes Act, The Medicines and Related Substances Control Act and the National Health Bill, all of which have or will bring about some radical changes to both the environment and the way in which private retail community functions in the future.

Some of the changes that are impacting on the pharmaceutical industry and causing turbulence are: a new pricing structure at the retail level, single exit price at the manufacturer level, a discontinuance of discounts in the supply chain, the allowing of ownership of retail community pharmacies by persons other than pharmacists, the creation of designated service providers by service payers and the issuing of dispensing licenses to healthcare professionals who are not pharmacists. Thus, it can be seen that the retail community pharmacy sector is a sector that is experiencing environmental turbulence, and hence it will provide a rich environment to investigate the strategic processes of small businesses operating in a turbulent environment.

2.10 THE IMPORTANCE OF THE STUDY FOR THE PRACTICE ENVIRONMENT: RETAIL COMMUNITY PHARMACY

Researchers and healthcare professionals continually strive to find ways to optimise the value of services – to lower costs while at the same time improving the quality of care. While the concept of quality is embedded in all aspects of drug supply, its importance in business and strategic management is often overlooked and its perspectives may even be seen to be mutually exclusive.

Retail community pharmacists have always practised in an environment where their professional obligations co-exist with their numerous business responsibilities. This duality between professionalism and mercantilism has become more pronounced nowadays, in the light of the emphasis placed on cost-containment in the healthcare sector; and practising in such an environment places these healthcare professionals under pressure to meet business objectives whilst at the same time maintaining a highly professional image. In this environment, very little is known about the manner in which the retailers configure their resources to be successful in the increasingly competitive marketplace (Szeinbach and Barnes, 1995).

2.11 CHAPTER CONCLUSIONS

This chapter reviewed the literature to provide a theoretical background to the study and motivate for and justify the propositions developed. Using the identified reconfiguration enabling processes, reconfiguration processes and themes that emerged from the personal interviews, this chapter synthesised a set of strategic processes for small businesses operating in a turbulent environment.

This literature review chapter leads to the next chapter, which is the research methodology chapter which explains the research methodology employed in this study.

CHAPTER THREE RESEARCH METHODOLOGY

CHAPTER 3: RESEARCH METHODOLOGY

3.1 THE CHAPTER SUMMARY

This aims of this chapter were to describe the research stages and the elements of the research process, focusing on the primary data collection methodology, both qualitative and quantitative and the method that was used in the process of theory building and proposition development, as well as explaining how the instrument was designed, the nature of measurement, the soundness of measurement, the pilot study, the population and sampling methods, the data preparation and the data analysis methods.

This research methodology chapter commenced with a clear layout of the nine research stages, from the research problem formulation stage to the data analysis stage. The chapter then described the elements of the research process. The degree of problem crystallisation was shown by the description of the research as an initial qualitative, exploratory study, followed by a quantitative descriptive analysis and finally by a quantitative, formal, empirical study method. The researcher's control of variables was illustrated by an explanation of how the researcher had no control of the variables in the sense of being able to manipulate them. The time-dimension of the study as was indicated by the cross-sectional nature of the study, which showed that the study represented a moment in time.

The use of Dubin's theory building and proposition development methodology was clearly explained. Each proposition that was developed was motivated for comprehensively in Chapter 2.

The questionnaire design process indicated how the themes that emerged from the personal interviews with six small business owners, all retail community pharmacists were incorporated into the draft questionnaire together with the relevant strategic processes extracted from the literature.

This chapter also indicated that prior to the pilot study, this draft questionnaire, was first evaluated by a panel of six experts, comprising, academics, small business owners and pharmacists, and that the questionnaire was refined according to the comments and suggestions, giving rise to the pilot questionnaire. The pilot questionnaire was then subjected to a pilot study that comprised of ten respondents, all small business owners who were retail community pharmacists.

This chapter described the nature of measurement used in the study as the Likert scaling method and explained its appropriateness of use in this type of study. The soundness of measurement in terms of validity and reliability parameters were also described in this chapter. The content validity criterion was satisfied by the evaluation of the draft questionnaire by the panel of experts. The criterion-related validity parameter was satisfied by the genesis of the questionnaire in a validated set of “best practices” from the Malcolm Baldrige National Quality Award Criteria. The construct validity was satisfied by the use of the factor analysis which refined the measuring instrument and confirmed that the factors actually measured the strategic processes of small businesses operating in a turbulent environment. The reliability criterion was satisfied by the high Cronbach Alpha values obtained indicating the consistency and homogeneity among the items in the questionnaire.

The section dealing with the pilot study chapter commenced with an explanation of the purpose of the pilot study and then a description of the pilot study participants, who were ten small business owners who were retail community pharmacists. The chapter then detailed the analytical procedures that were carried to ensure the validity and reliability of the instrument, using the SPSS 11.5 statistical package.

The alpha coefficients that were obtained for the reliability analysis ranged from moderate to high in general showing a moderate to high internal consistency in the questionnaire. The factor analysis results that were obtained showed that a five factor solution showed the best interpretable factor pattern, which loaded out onto the factors staff, leadership, measurement, customers and networks and support systems.

The chapter then explained that a second factor analysis was conducted on the instrument after adjustment to the five factor solution, to ensure that the correct factor solution was used. The second factor analysis results showed that the factor, staff, loaded out onto a two factor solution, for knowledge, empowerment and motivation as well as reward. This chapter thus showed that a five factor solution showed the most interpretable factor patter, with the factor, staff being sub-divided into staff knowledge, empowerment and motivation and staff reward.

The chapter explained the limitations to the pilot study and concluded that the questionnaire had satisfactory reliability and validity for the study.

In dealing with the administration of the final questionnaire to the population under test, the chapter highlighted the relevant population of this study [retail community pharmacies that are small businesses], comprising of 2549 pharmacies. The

chapter also indicated that at a confidence level of 95% and a confidence interval [expresses as a decimal] of 0.05, a sample size of 334 was required for this population. The sample was selected using an unrestricted, simple, random, probability sampling approach with the SPSS 11.5 statistical package. To account for a 30% non response rate, 477 questionnaires were distributed. However, only 134 questionnaires were returned. Of these four questionnaires were incomplete and were not included in the study. The study's new confidence interval [expressed as a decimal], with this reduced sample size was then calculated to be 0.08 at the 95% confidence level.

The chapter also indicated methods by which the data would be prepared for analysis by describing the editing, coding and entering of data procedures.

The methods of data analysis were also described in this chapter with reasons cited for the choice of descriptive and inferential statistics used in the study. The chapter indicated that the type of descriptive statistics that this study used were the means and the standard deviations. The means were used because they measure the central tendency was used to determine the average response of respondents towards a test, while the standard deviations were used because they improve interpretability by removing the variance's square and expressing deviations in their original units.

Besides the Cronbach Alpha and factor analysis, the chapter indicated that t-tests were also used. Since this study revolved around the determination of the significance of the difference between two variables that were both provided by the same set of respondents, the use of a paired t-test thus provided the best test of statistical significance.

3.2 INTRODUCTION

Business research can be defined as a systematic investigation of phenomena of interest to business decision makers. The use of scientific business research, which is a specialized type of investigation characterized by the rigor of the analytical tools and techniques applied, can result in research-based decision making becoming an important tool for those organizations seeking competitive advantage. Some of the defining characteristics of scientific business research are:

- The purpose of the research must be clearly defined
- The research process must be detailed in a research proposal;
- The research design must be thoroughly planned
- The limitations must be frankly revealed
- The analysis of the data must be sufficiently adequate to reveal its significance and the methods of analysis should be appropriate
- The findings must be presented unambiguously
- The conclusions must be justified

(Cooper and Schindler, 1998: 14-18)

The research purpose and the research objectives and the research propositions are stated in chapter 1, as well as the scope and demarcation of the study and the study limitations. The research design is also described in this chapter. In chapter 2, research propositions are derived from scientific literature, as well as from existing research. The research methodology is described in this chapter and the qualitative and quantitative findings are presented in Chapters 3. The results are discussed in Chapter 5 and they form the basis of and justify the conclusions presented in Chapter 6.

Babbie and Mouton (1998:74), Mouton (2001:56) and De Vos (2002:137) point out that research methodology can be defined as the process, instruments and procedures to be used in such research. Therefore this chapter will present the details of the methodology applied to this study. This research study is a cross-sectional, formal, qualitative and quantitative study. The qualitative aspect is carried out via a series of personal interviews while the quantitative aspect uses an *ex post facto* statistical design to achieve its research purpose viz. to investigate the strategic processes carried out by small businesses operating in turbulent environments through the achievement of the following core elements of its research purpose:

1. The conceptual identification and the separation of dynamic capabilities into those processes that are reconfiguration enabling processes and those processes that are reconfiguration processes.

2. The conceptualisation of strategic processes or dynamic capabilities with a specific set of measurable “best practice” processes that capture and incorporate the idea of strategic processes or dynamic capabilities while being grounded in empirical research.

3. The quantitative identification and description of the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment and their resource allocation.

4. The development of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. The model will differentiate dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer-term strategy of altering the general resource base of these small firms. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments will be optimised.

3.3 THE STAGES OF THE RESEARCH PROCESS

This study will follow a research plan in the nine stages outlined below:

Stage 1: The formulation of the research problem

The research problem to be investigated will be formulated from literature that examined the background to the problem. This research stage is reported in Chapter 1.

Stage 2: The identification of the research purpose and the research objectives

Using the identified research problem, the research purpose and the research objectives will be identified. This research stage is reported in Chapter 1.

Stage 3: The literature review

A detailed literature review will be performed on strategic processes, dynamic capabilities, small business, quality, turbulent environment and changing environment. This research stage is reported in Chapter 2.

Stage 4: The qualitative approach

An exploratory, qualitative investigation will be performed through the conduction of personal interviews with six small business owners, all retail community pharmacists. Key themes emerging from these interviews will inform the questionnaire development process. This research stage is reported in Chapter 3.

Stage 5: The design of the instrument

Using the literature review and the key themes from the qualitative investigation, a draft questionnaire will be developed to ensure that the research purpose and objectives are achieved and the research propositions are satisfied and in so doing, lead to a solution to the research problem. This questionnaire will be evaluated by a panel of six experts, prior to being administered in the pilot study. This research stage is reported in Chapter 3.

Stage 6: The pilot study

The pilot questionnaire will be distributed to ten respondents that are similar in profile to the target population. The results of the pilot study will be analysed using the SPSS 11.5 statistical package to ensure that the required validity and reliability parameters are met. This research stage is reported in Chapter 3.

Stage 7: The development of the research propositions

Based on the literature review, the results of the expert panel evaluation, the results obtained from the pilot study and the results of the qualitative analysis, research propositions will be developed. This methodology of research stage is reported in Chapter 3 and the research propositions and motivated for and reported in Chapter 2.

Stage 8: The refinement of the final questionnaire and its administration

Based on the results of the pilot study, the final questionnaire will be refined and then administered to the chosen sample of respondents. This research stage is reported in Chapter 3.

Stage 9: Data analyses

Quantitative statistical analyses will be performed on the returned questionnaires using the SPSS 11.5 statistical package. These are reported in Chapter 4.

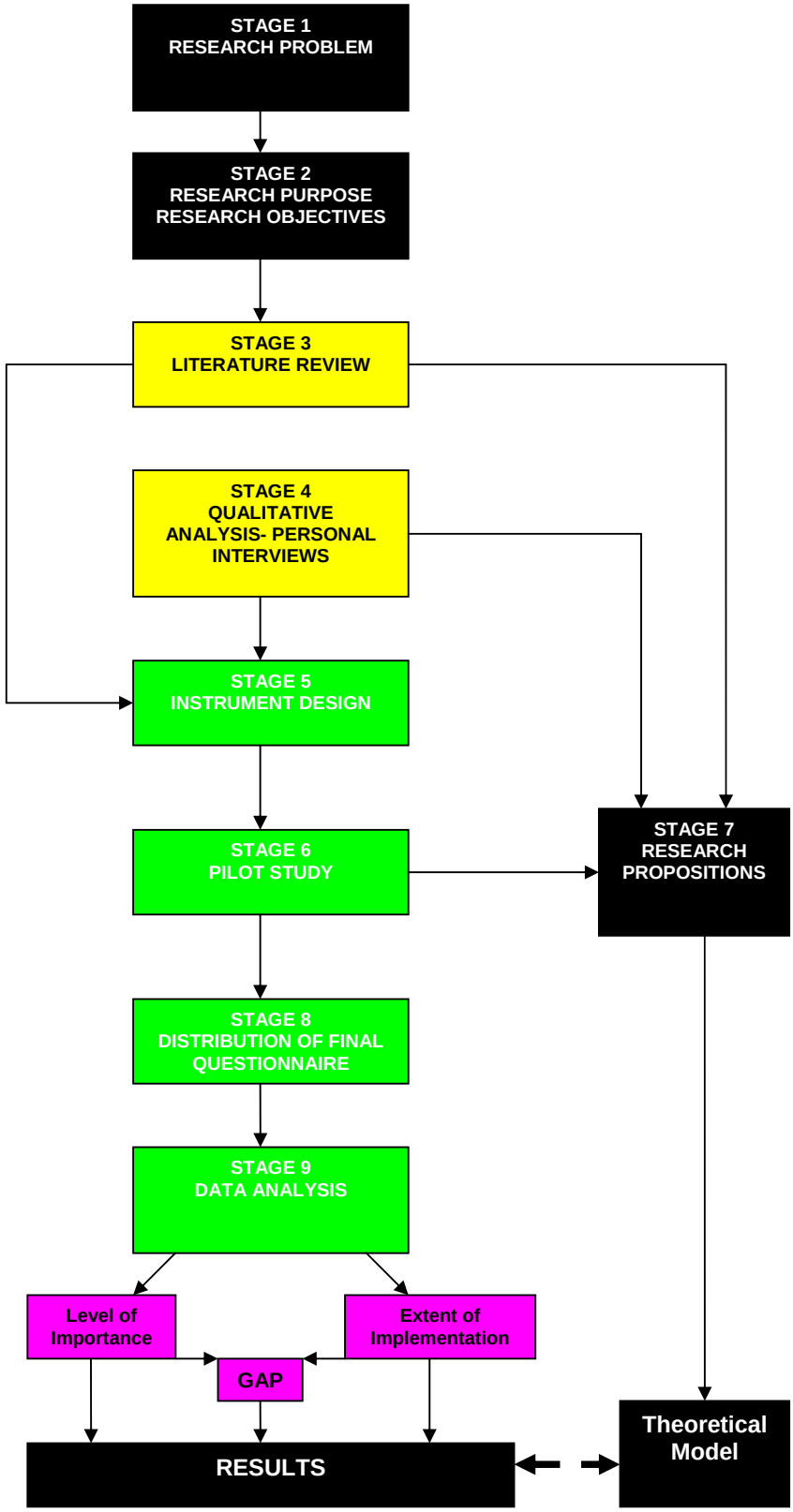


FIGURE 9: A FLOWCHART OF THE RESEARCH STAGES

3.4 THE ELEMENTS OF THE RESEARCH PROCESS

3.4.1 THE DEGREE OF PROBLEM CRYSTALLISATION

According to Cooper and Emory (1995:115) a research study may be viewed as exploratory or formal – the distinction being found in the degree of structure and the immediate objective of the study.

This study commenced on an exploratory note, with a qualitative approach, due to the paucity of literature on strategic processes of small businesses operating in turbulent environments. It proceeded to the quantitative formal phase using an empirical study. This is a structured inventory of the knowledge and opinions of many for precise measurement. These research elements are reported in Sections 3.6 and 3.7.

3.4.2 RESEARCHER CONTROL OF VARIABLES

In the qualitative phase of this specific study, bias of the researcher was reduced and/or avoided by the development of a key theme table or matrix to record the respondent's responses in an impartial manner. This research element is reported in Section 3.6.

The quantitative phase of this specific study used an ex post facto design (Cooper and Emory, 1995:115; Cooper and Schindler, 1998:131 and Davis, 2000:138), as the researcher had no control over the variables in the sense of being able to manipulate them. The researcher was limited to holding factors constant by the judicious selection of subjects according to the sampling procedures and by the statistical manipulation of the data that was collected. This research element is reported in Section 3. 7 and in Chapter 4.

3.4.3 THE TIME DIMENSION

A cross-sectional study which represents a moment in time (Cooper and Emory, 1995:116; Cooper and Schindler, 1998:132) was conducted. This research element is reported in Sections 3.6 and 3.7.

3.4.4 THEORY BUILDING AND PROPOSITION DEVELOPMENT

A proposition is a statement about concepts that may be judged true or false, if it refers to observable phenomena, while a hypothesis is a proposition that is formulated for empirical testing (Cooper and Schindler, 1998: 43). By the development of a set of propositions that establish the relationship between things in a systematic way theories can be created (Henning, 2004:14). Thus proposition research is especially useful in researching areas that that are new and that can be observed and described, in order to generate new theories and contribute to the development of the area's body of knowledge. A theory is a system of ideas and abstracts that organizes knowledge about the social world (Neuman, 2000). This research element is reported in Section 3.5.

3.5. THEORY BUILDING AND PROPOSITION DEVELOPMENT

The literature review reported on in Chapter 2, shows a paucity of literature and research on the strategic processes of small businesses operating in a turbulent environment. Thus, this study's approach to building theory will be a valuable contribution to this field of study. This study uses propositions rather than hypotheses for the following reasons:

- Subject area –the subject area, the strategic processes of small businesses operating in a turbulent environment, is relatively new and there is a paucity of literature and research in this area. Since, this study is not based on any previously derived research model specific to the subject area, the use of propositions enables the study to be approached from a much more pragmatic and meaningful viewpoint.
- Observable phenomena – the strategic processes of small businesses operating in a turbulent environment are observable and describable phenomena.

Dubin (1978) describes an eight –step theory building methodology. Dubin's theory building method has been described by Chermack (2005:61), as the most appropriate and comprehensive method of theory building available.

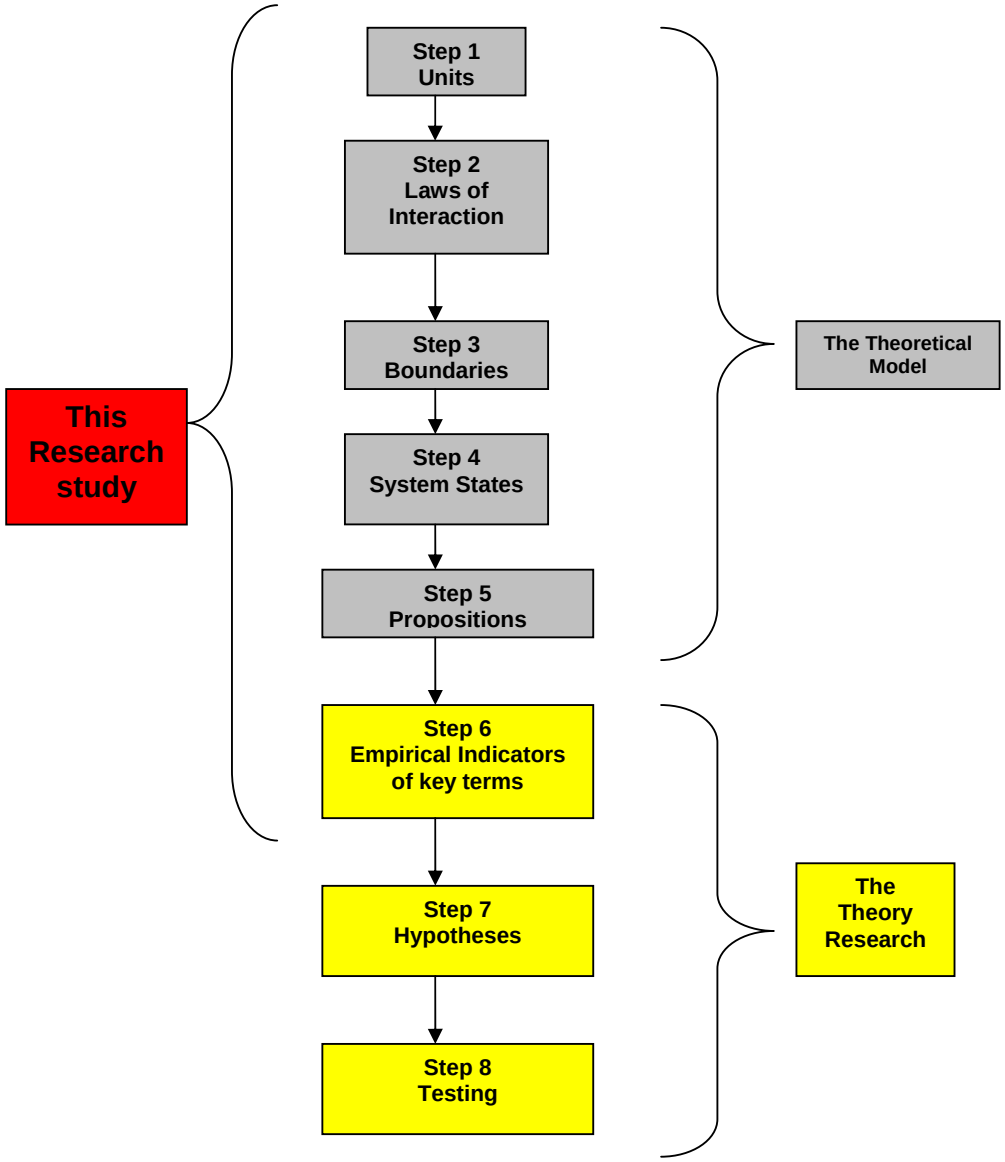


Figure 10: **Dubin's eight – step theory building research methodology**
(Dubin, 1978, in Chermack, 2005:61)

Using steps 1 to 5 of this described theory building methodology, this research study builds a theoretical model. It also engages in step 6 where it identifies empirical indicators of key terms and tests these propositions empirically in order to refine and support the theoretical model developed. This then paves the way for future research studies in this subject area to construct hypotheses to predict values and relationships among the units of the model. The theoretical model and the empirical indicators for the key terms are reported in this section, while the

propositions are comprehensively motivated for in Chapter 2. The empirical tests are reported in Chapters 4 and 5, while Chapter 5 draws conclusions regarding any empirical support for the theoretical model based on the results obtained.

Step 1: Developing units of the theory.

The units of the theory are the building blocks of the theory and are selected based on the literature (Chermack, 2005:61) and experience (Lynham, 2002:221). The theorist thus has unlimited opportunities to employ units of his/her choice (Dubin, 1978:78). The units of a theory of strategic processes of small businesses operating in a turbulent environment are:

1. The level of importance of strategic processes, in general and specifically, the level of importance of reconfiguration enabling processes and the level of importance of reconfiguration processes by small businesses operating in a turbulent environment
2. The extent of implementation of strategic processes, in general, and specifically, the extent of implementation of reconfiguration enabling processes and the extent of implementation of reconfiguration processes by small businesses operating in a turbulent environment.

Dubin (1978:73) has proposed four guidelines to assess the appropriateness of the units chosen. They are:

Guideline 1—Relational units cannot be combined in the same theory with enumerative or associative units that are themselves properties of that relational unit.

Guideline 2—Where a statistical unit is employed, it is by definition a property of a collective. In the same theory, do not combine such a statistical unit with any kind of unit (enumerative, associative, or relational) describing a property of members of the same collective.

Guideline 3—Summative units have utility in education of and communication with those who are naïve in a field. Summative units are not employed in scientific models.

Guideline 4—A unit type must be chosen, and a unit can be of only one type. Further specification is at the discretion of the theorist. The initial distinctions are

intended to help the theorist in considering the variables to include in the theory and to assess the maturity or development stage of the domains to be included.

The proposed theoretical model of strategic processes of small businesses operating in a turbulent environment combines only enumerative units. Therefore, there is no risk of violating any of the four guidelines proposed by Dubin (1978).

The elements of each unit have been reported on in the literature review in Chapter 2.

Step 2: Specifying the laws of interaction describing the relationships among the units.

The laws of interaction describe how the units relate to each other. The proposed theoretical model of strategic processes of small businesses operating in a turbulent environment includes five categorical laws and two sequential laws. “A categoric law of interaction is one that states that values of a unit are associated with values of another unit” (Dubin, 1978: 98). Sequential laws of interaction are defined as laws that are “always employing a time dimension. The time dimension is used to order the relationship among two or more units” (Dubin, 1978: 101), i.e. that one precedes the other.

Categorical laws:

1. All units are required for the theory to function.
2. There is a greater-than-chance probability that the level of importance of strategic processes in small businesses operating in a turbulent environment is associated with the extent of implementation of strategic processes in these small businesses.
3. There is a greater-than-chance probability that the level of importance of reconfiguration enabling processes in small businesses operating in a turbulent environment is associated with the extent of implementation of reconfiguration enabling processes in these small businesses.
4. There is a greater-than-chance probability that the level of importance of reconfiguration processes in small businesses operating in a turbulent environment is associated with the extent of implementation of reconfiguration processes in these small businesses.

5. There is a greater-than-chance probability that the extent of implementation of reconfiguration processes in small businesses operating in a turbulent environment is associated with the level of importance of strategic processes in these small businesses.

Sequential Laws:

1. The level of importance of strategic processes in small businesses operating in a turbulent environment precedes the implementation of strategic processes in these small businesses.
2. The level of importance of the reconfiguration enabling processes in small businesses operating in a turbulent environment precedes the implementation of reconfiguration enabling processes in these small businesses.
3. The level of importance of the reconfiguration processes in small businesses operating in a turbulent environment precedes the implementation of reconfiguration processes in these small businesses.
4. The extent of implementation of reconfiguration enabling processes in small businesses operating in a turbulent environment precedes the implementation of these processes in these small businesses.

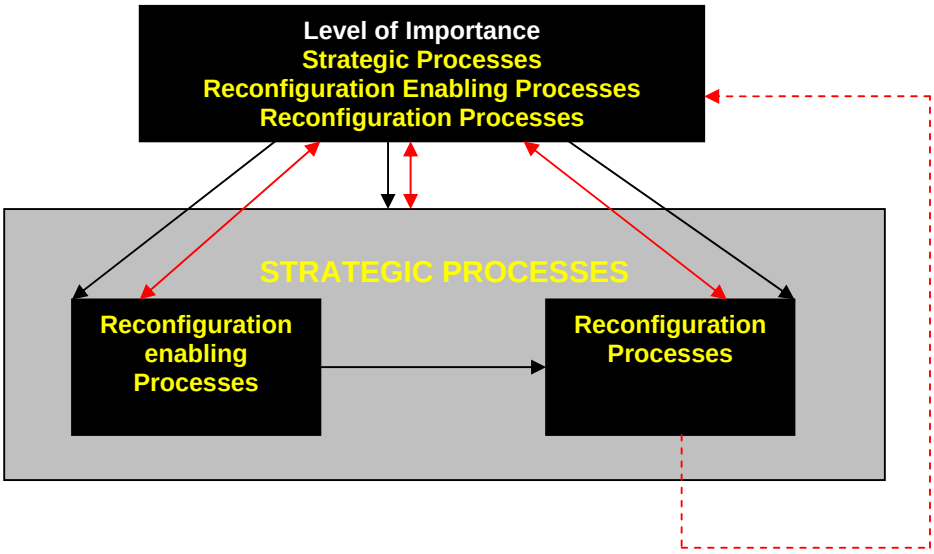


FIGURE 11: DIAGRAM OF THE LAWS OF INTERACTION OF THE PROPOSED THEORETICAL MODEL FOR THE STRATEGIC PROCESSES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT (Categorical laws are designated by red arrows and sequential laws by black arrows. Feedback is designated by the red dashed line.)

Dubin (1978) designated parsimony as the single criteria for evaluating the laws of interaction in a theoretical model. Parsimony is established by utilizing the minimum complexity and number of laws necessary to relate all of the units in the model and has solely to do with the number of laws that link the units. In this proposed theory, the minimum number of laws is used to connect each unit, categorically, and sequentially, including a law stating the requirement for all stated units, and one law covering the influence of feedback from reconfiguration processes. This gives five categorical laws and four sequential laws.

Step 3: Determining the boundaries within which the theory is expected to function.

The boundaries locate the theory in its environment. The determination of the boundaries of a theoretical model requires that the theorist identify the domain or multiple domains in which the theory is expected to operate (Dubin, 1978).

There are two boundaries for this proposed theoretical model viz. small businesses and turbulent environments. The elements of each boundary have been reported on in the literature review in Chapter 2. They will be described again below to provide justification for the use of these particular boundaries in the theory.

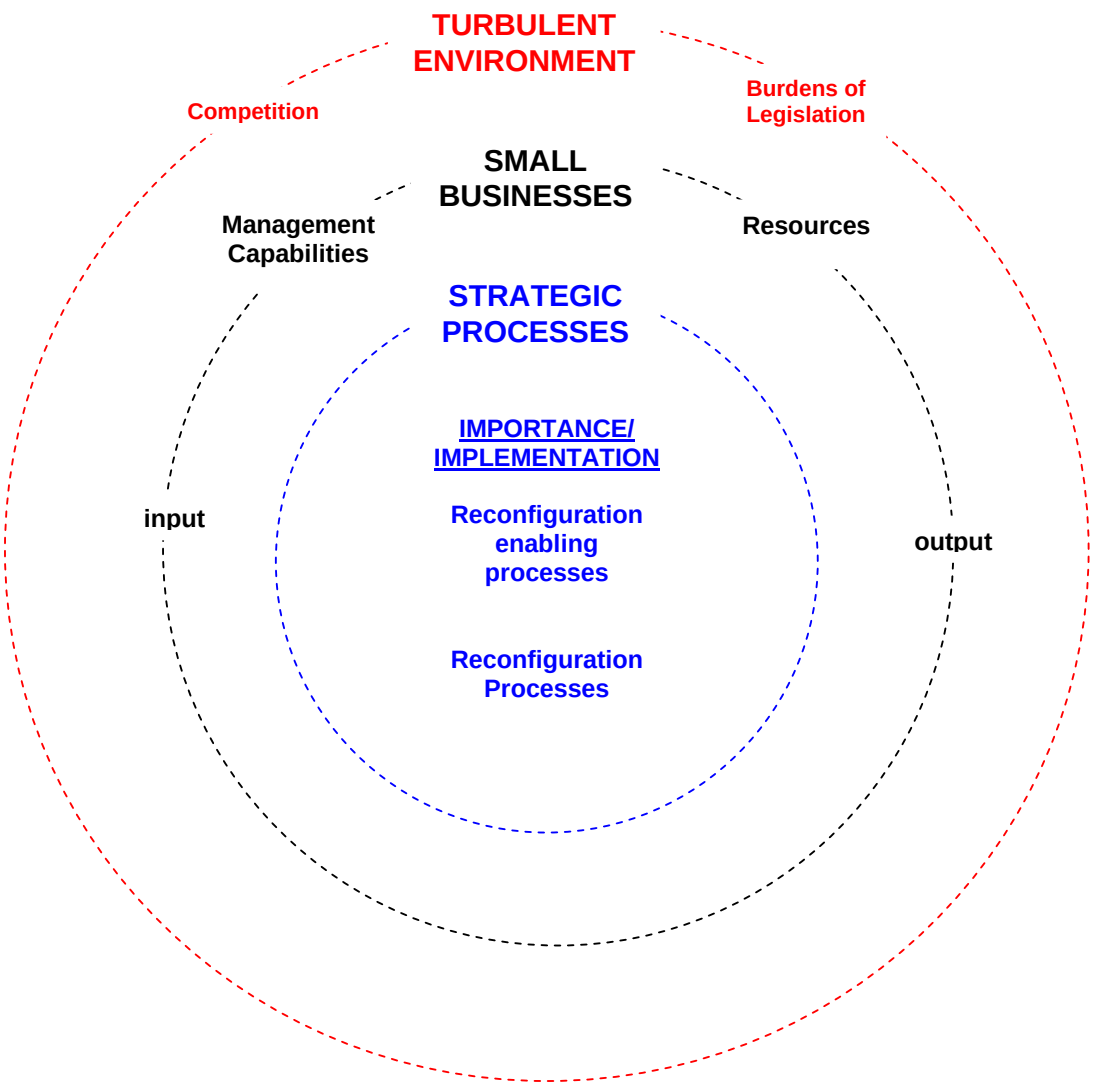


FIGURE 12: **THE BOUNDARIES OF A THEORY ON THE STRATEGIC PROCESSES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT.**

Step 4: Identifying the system states in which the theory is expected to function.

According to Dubin (1978:144), a state of a system may be defined by three features:

1. All units of the system have characteristic values
2. The characteristic values of all units are determinant
3. This constellation of unit values persists through time

Thus, it is necessary for the values of all units to be known in order to determine the system state.

The level of strategic process implementation will vary and transit among several states. Borrowing from Chermack (2005:65) and to illustrate the differing states of transition, the theory proposed will adopt a (0, 1) coding. By this, it is intended that 0 indicates absence of the characteristic under examination (for example, if the unit level of importance of strategic processes was coded 0, this would be taken to indicate an absence of importance).

Any value other than 0 assigned to a state, reflects the level of development of that state. In addition, the laws of interaction suggest that the theory being developed occurs along a time sequence i.e. actions with regard to specific units precede the actions with regards to others. Thus, as the system transitions from state to state, the unit values shift from 0 to 1.

There are five system states in this proposed theory:

1. System state 1- Non-operation (unit value =0)
2. System state 2- Level of importance of strategic processes, reconfiguration enabling processes and reconfiguration processes (unit value 0 to 1, depending on level of importance)
3. System state 3- Extent of implementation of strategic processes (unit value 0 to 1, depending on extent of implementation)
3. System state 4- Extent of implementation of reconfiguration enabling processes (unit value 0 to 1, depending on extent of implementation)

4. System state 5- Extent of implementation of reconfiguration processes (unit value 0 to 1, depending on level of importance)

Step 5: Specifying the propositions about how the theory is expected to operate.

According to Dubin (1978: 160), a proposition may be defined as a truth statement about a model when the model is fully specified in its units, laws on interaction, boundary and system states. Thus, propositions are predictive statements that follow logically from the previous steps of the theory building method. Therefore, the logical steps for a theory on strategic processes for small businesses operating in a turbulent environment are as follows:

Proposition 1:

If there is a positive correlation between the level of importance and extent of implementation of strategic processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Proposition 2:

If there is a positive correlation between the level of importance and extent of implementation of reconfiguration enabling processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Proposition 3:

If there is a positive correlation between the level of importance and extent of implementation of reconfiguration processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Step 6: Empirical Indicators of a theory of the strategic processes of small businesses operating in a turbulent environment

Informed by the above propositions and the literature three empirical indicators are identified for the proposed theory on the strategic processes of small businesses operating in a turbulent environment. These empirical indicators are necessary to be able to identify values and measures for the interacting units of the proposed theory, which must be verified through empirical research (Lynham and Chermack, 2006: 82). This theory empirically tests these developed indicators in order to refine and support the theoretical model developed. The general empirical indicators of the proposed theory are as follows:

1. **Empirical Indicator 1 for the Unit: Extent of implementation of strategic processes**

   The value of the unit will increase as a result of an increase in the level of importance of strategic processes as measured by any instrument that measures the allocation of resources to these strategic processes.

2. **Empirical Indicator 2 for the Unit: Extent of implementation of reconfiguration enabling processes**

   The value of the unit will increase as a result of an increase in the level of importance of reconfiguration enabling processes as measured by any instrument that measures the allocation of resources to individual reconfiguration enabling processes.

3. **Empirical Indicator 3 for the Unit: Extent of implementation of reconfiguration processes**

   The value of the unit will increase as a result of an increase in the level of importance of reconfiguration processes as measured by any instrument that measures the allocation of resources to individual reconfiguration processes.

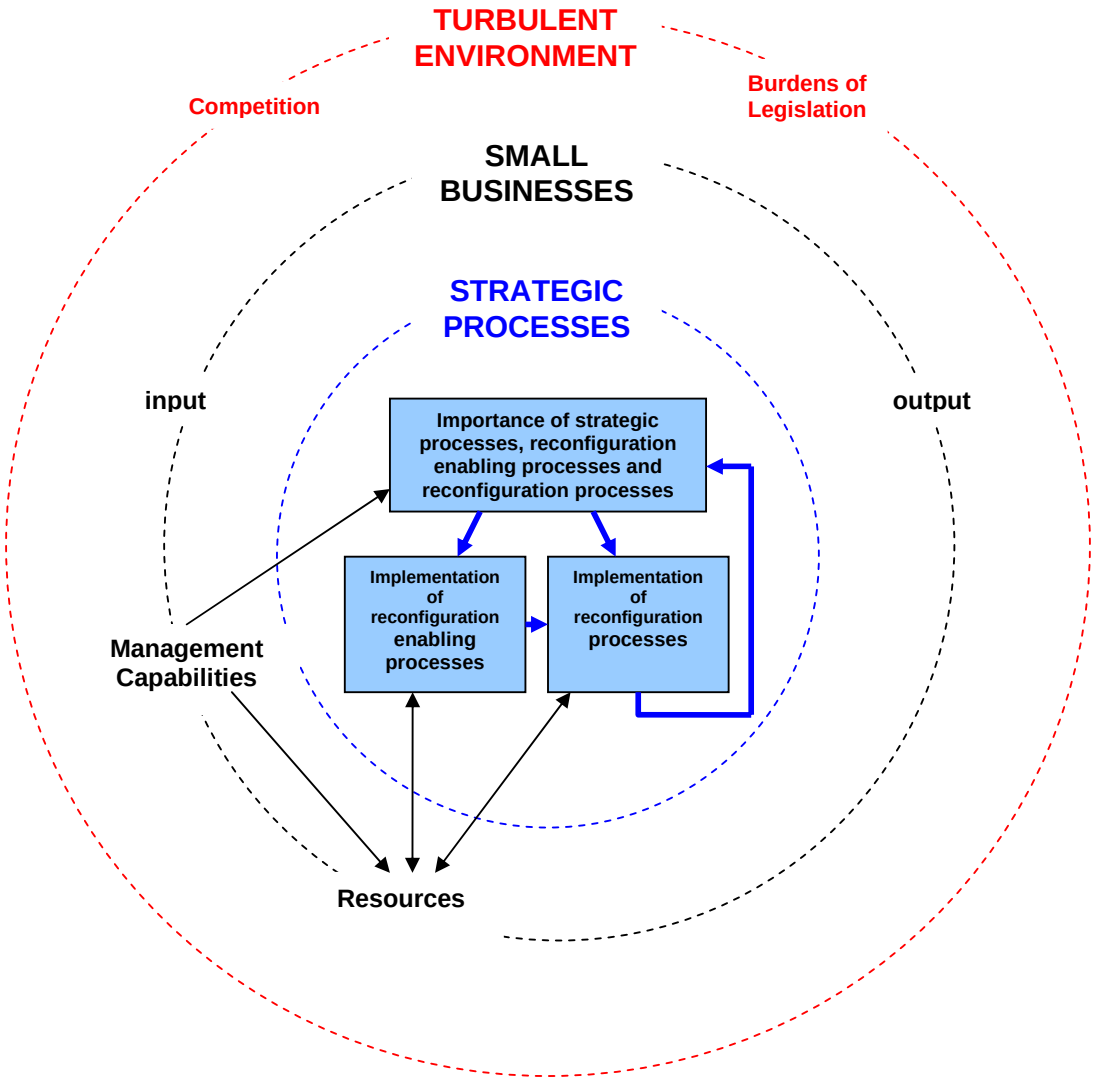


FIGURE 13: A THEORETICAL MODEL OF THE STRATEGIC PROCESSES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

The completion of Dubin's steps 1-5 (Dubin, 1978), results in a theoretical model for the strategic processes of small businesses operating in a turbulent environment. Furthermore, this section also engaged in step 6 of Dubin's theory building methodology by developing empirical indicators of key terms. Chapter 4 will show the empirical testing of these key terms in order to refine and support the theoretical model. This will pave the way for future research studies to formulate and test hypotheses that can predict values and relationships in this model.

The essence of the theoretical model specifies the core concepts in the theory, how they interrelate, the context in which they relate, the conditions under which the theoretical model is expected to operate, and the propositions about the model. In addition, this section also lays down the groundwork for part two of Dubin's eight-step theory building research methodology (Dubin,1978), by formulating empirical indicators for the proposed theory. Thus, this section has provided a logical model with empirical indicators.

The literature review in Chapter 2 has indicated that this is the first of its kind pertaining to phenomena known as the strategic processes of small businesses operating in a turbulent environment.

3.6 THE QUALITATIVE APPROACH: PERSONAL INTERVIEWS

Qualitative research is an unstructured, exploratory research method based on small samples intended to provide insight and understanding of the problem setting (Malhotra, 1996:164). In this study, the qualitative research was executed by means of personal interviews with the leadership of small businesses [retail community pharmacies]. The main aim of this procedure was to identify important aspects to be included in the questionnaire [measuring instrument] that may have been absent from the literature due to a paucity of information and literature available on the strategic processes of small businesses operating in a turbulent environment.

Face–to-face semi-structured interviews were conducted with a group of six small business owners; all retail community pharmacists. Due to the initial exploratory nature of this study, this method was particularly appropriate. The choice of the members of the group was based on the match of the business to the research questions, the accessibility and the availability of the small business leadership as well as the willingness of the small business leadership to be interviewed. In order to manage and extract meaningful trends from the qualitative data generated by the interviews the size of the group was limited to six.

The interviews were conducted in a semi-structured conversational manner, with the interviewer (the researcher) guiding the discussion in order to maintain it within the boundaries of the research topic. The interviewer made notes to record the discussion as it progresses.

According to Cooper and Schindler (1998:291), a personal interview is a two-way conversation initiated by an interviewer to obtain information from a respondent. The interviewer generally controls the topics and patterns of discussion. While this is a costly method, both in terms of time and money, the advantages of personal interviews include:

- The depth of information and detail that can be secured.
- The greater control that interviewers possess in this type of interrogation.
- The ability to adjust the language of the interview.

The initial exploratory nature of this study required a method of data collection that would allow the generation of ideas, themes and topics that may not have been found in the literature due to the paucity of research and literature on the strategic

processes of small businesses that operate in a turbulent environment, hence the use of the personal interview research methodology.

A successful personal interview must meet three broad conditions viz.:

- Availability of the needed information from the respondent
- An understanding by the respondent of his or her role
- Adequate motivation by the respondent to cooperate

(Cooper and Schindler; 1998:292).

In this study, the respondents were all small business owners who are retail community pharmacists. From the interview introduction, each respondent was made aware of his role in the interview. Furthermore, being a small business owner operating in a turbulent environment, each respondent was acutely aware of the impact of the environment on his business and in addition each respondent was informed that a summary of the results of this study would be made available to each respondent.

According to Cooper and Schindler (1998: 297) that non-response and response errors as well as sampling errors can occur during this type of surveying. This study ensured that specific appointments were made with each respondent at times that the respondent was available and furthermore, by specifically recording all answers in a key theme table or matrix, there was impartiality in the recording and interpreting of answers.

This research element is reported in Section 3.7.1.

3.7 THE QUANTITATIVE APPROACH: THE SELF-ADMINISTERED MAIL SURVEY

The quantitative phase of this research study is a formal, structured, empirical self-administered questionnaire. According to Cooper and Schindler (1998: 303) the self-administered questionnaire has become ubiquitous in modern living.

A draft questionnaire was designed to establish and quantify the level of importance and extent of implementation of strategic processes in small businesses. This instrument was constructed from the concepts and themes extracted from the literature as well from the semi-structured personal interviews. The draft instrument was refined following an evaluation by a panel of six experts.

The panel of experts used comprised academics, pharmacists and small business owners and the participants in the pilot study comprised small business owners from the retail community pharmacy sector. The draft instrument was then administered to participants of the pilot study and the returned questionnaires analysed. The results obtained from this analysis formed the basis for the further refinement of the questionnaire in order to create the final questionnaire. The final measuring instrument was then administered to the sample of the population that was calculated to provide statistically significant results.

According to Cooper and Schindler (1998:304), although this method has some disadvantages e.g. accurate mailing lists required, no interviewer intervention available for probing or explanation and skewed responses are often obtained; the advantages are particularly suitable to this study, in that it allowed contact with otherwise inaccessible respondents, it allowed for an increased geographical coverage without an increase in costs, its anonymity allowed for more complete and honest answers and it allowed the respondents more time to think about the answers.

The study also attempted to overcome the disadvantages of this survey method by ensuring that the covering letter and the questionnaire instructions were as complete and as concise as possible. This process was aided by the pre-evaluation by the panel of experts as well as the pilot study. The pilot study together with the reliability and validity tests and the factor analysis performed reduced the impact of any skewed responses. Furthermore, the target population was the retail community pharmacy population, whose contact details were obtained from the South African Pharmacy Council.

These research elements are reported in Sections 3.8 and 3.9.

3.7.1 THE DESIGN OF THE INSTRUMENT

An instrument is the primary device by which measurement is accomplished and in the development of a measurement scale the variables and concepts that need to be measured for the study must be determined (Davis,2000:193:194).

In this study this determination started with the identification of the research problem the research purpose and the research objectives and subsequently flowed to the literature review and the set of personal interviews conducted.

Strategic concerns in the design of the instrument include:

- What type of data is needed to find a solution to the research problem?
- What communication approach will be used?
- Should the questions be structured, unstructured or some combination?

(Cooper and Schindler, 1998:324)

Small businesses are organic and loosely structured, rather than mechanistic and highly formalised. Thus, the processes in a small firm are seldom readily visible (Beaver and Jennings, 2005:9). Moreover, there is paucity of information on strategic processes of small businesses operating in a turbulent environment. Therefore the qualitative approach was an especially appropriate method with which to commence this study's investigative process.

However, Beaver and Jennings (2005:9), also note that despite this loose and less formal approach to management processes in small businesses, certain essential management activities that have been defined and refined throughout a long history of management research must be carried out. Hence, this study combined the qualitative approach with a quantitative approach that uses identified "best practices" for small business excellence as its basis. This approach is also supported by Cooper and Schindler (1998:309) who have state that using a mixed-mode of communication with respondents enables the tailoring of the research method to suit the unique needs of a study.

3.7.1.1 THEMES THAT EMERGED FROM THE PERSONAL INTERVIEWS

The following table describes the results of the personal interviews.

TABLE 3: THEMES EMERGING FROM THE PERSONAL INTERVIEWS

THEME	KEYWORDS USED
STRATEGIES	Cost minimization, value added services, focus on key lines, focus on core business, broad goals which guide decisions, **customer service, staff focus, support systems, and leadership.**
CUSTOMERS & CUSTOMER SERVICE	Excellent, personalized, loyalty, good communication and feedback, trust, knowledge, skills, attitude and good relationships
STAFF	Backbone of business, loyalty, good communication, support and understaffing
SUPPORT SYSTEMS	Family, friends, community and professional [limited]
LEADERSHIP	Plan and make decisions with limited input from staff, informal methods of scanning the environment, finger-on-the-pulse, active, busy, hectic work environment, pressure, low morale, decreased motivation, decreased risk taking, and hesitancy.

The information obtained from the interviews informed the design of the measuring instrument in order to improve on the richness and quality of the research outcome.

3.7.1.2 DEVELOPMENT OF QUESTIONS

From the literature review in Chapter 2, emerged the reconfiguration enabling processes and the specific reconfiguration processes that lead to innovative resource reconfigurations. From the personal interviews in the section 4.2, emerged the key themes and core concepts of customers and customer service, staff, support systems and leadership. The questionnaire will be based on a synthesis of these streams. The synthesis of these separate streams formed the basis of the questionnaire design.

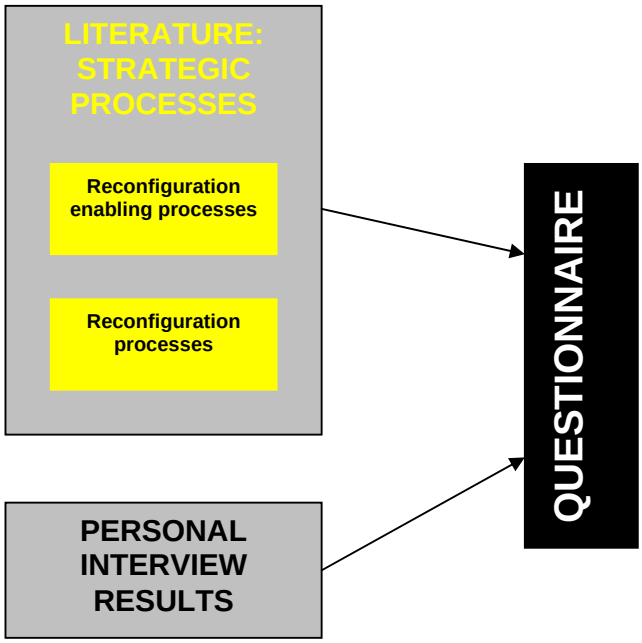


Figure 14 : QUESTIONNAIRE DESIGN

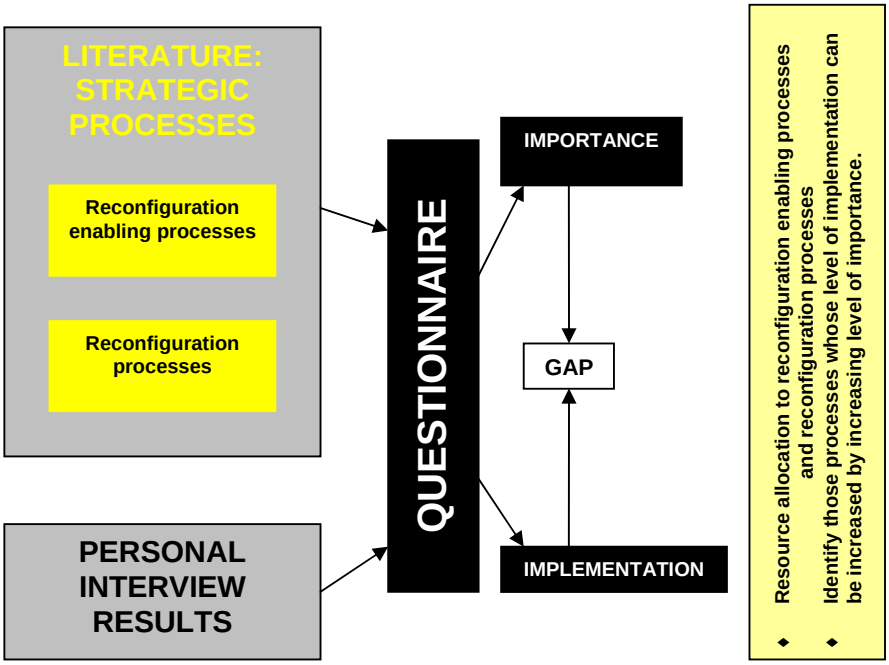


FIGURE 15 : QUESTIONNAIRE DESIGN AND EXPECTED OUTCOMES

3.7.1.3 PROCESSES AS QUESTIONS IN THE QUESTIONNAIRE

The following processes were incorporated as questions into the questionnaire. Some processes contain multiple ideas, which have been described by Alreck and Settle (1995) as “double-barrelled” questions. They have also said that respondents may be confused as to how to respond to these type of questions. However, this study’s rationale in using these types of questions was to prevent the survey from containing more questions and becoming longer. Moreover, it was also anticipated that the review of the questionnaire by the expert panel group and the pilot testing of the questionnaire would refine the questions that would be incorporated into the final questionnaire. The following table summarises the questions developed for the questionnaire to be evaluated by the panel of experts and subsequently to undergo pilot testing.

TABLE 4 : QUESTIONS DEVELOPED FOR THE QUESTIONNAIRE

Process 1:	**The leadership of small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organisation, when establishing organisational values, goals and performance expectations as well as when looking for business opportunities**
Process 2:	**The leadership of small businesses, through both formal and informal approaches fosters staff empowerment and innovation.**
Process 3:	**The leadership of small businesses serve as role models for the organisation and all stakeholders. Their values and expectations of performance are communicated and reinforced among managers and throughout the entire workforce.**
Process 4:	**The leadership of small businesses participates, encourages, supports, and recognizes involvement with their communities and professional associations to both support and strengthen them as well as the small business.**
Process 5:	**The leadership of small businesses have strong friend, family and professional support networks,**
Process 6:	**In its decision-making processes, the leadership of small businesses takes into account it's legal, ethical and risk requirements. By systematically addressing current and potential impacts in the decision-making processes, these become an integral part of performance management and improvement.**

Process 7:	**The leadership of small businesses is able to formulate a few simple rules to guide its strategic processes – how to execute a strategic process; know which opportunities can be pursued and which are outside the pale; able to rank the accepted opportunities, synchronize the pace of emerging opportunities and other parts of the company and know when to pull out of yesterday's opportunities.**
Process 8:	**The leadership of small businesses is able to restructure the business portfolio by creating a patching structure of enteprise in order to fit changing market opportunities – the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches to exploit market opportunities, is clearly understood; road maps which suggest how future patches are likely to evolve, are available.**
Process 9:	**The leadership of small businesses can enable the business to co-evolve by fostering, driving and executing collaborative linkages and managing group dynamics while at the same time rewarding individual performance.**
Process 10:	**The leadership of small businesses is able to lead with an impelling strategic focus while allowing organizational members to be active players in the strategic process.**
Process 11:	**The strategies that are developed are clearly translated into action plans that support the achievement of organizational objectives.**
Process 12:	**The leadership of small businesses have a thorough understanding of available resources, both internal and external, that can enable the achievement of strategic goals.**
Process 13:	**The leadership of small businesses are able to devise appropriate strategies that can maximise any resource advantage and overcome any resource limitation**

Process 14:	**Key human resource plans are derived from and linked to the overall business strategy with respect to work design; employee development, education and training; compensation and benefits and recruitment.**
Process 15:	**Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower people and further entrench the organizational culture. In addition, these work and job descriptions promote high performance and lead to flexibility and rapid response to the changing requirements of the marketplace.**
Process 16:	**Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning objectives.**
Process 17:	**Staff education, development and training activities are structured to balance organizational objectives with employee's individual knowledge and skills needs. The envisaged activities are jointly designed by the employees concerned and their managers detailing the specific needs, objectives and performance measures, clearly.**
Process 18:	**There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.**
Process 19:	**A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analysed as a source of improvement activities.**
Process 20:	**Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.**
Process 21:	**The staff and leadership of small businesses ensure that personalized service is offered to customers**

Process 22:	**The skills, knowledge, values and attitudes of the staff and leadership of small businesses are important, relevant, valuable and available to customers.**
Process 23:	**The design of key services and the service delivery process is addressed systematically, incorporating all stakeholders and accounting for changing customer requirements, the environment and technology.**
Process 24:	**The design of key services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.**
Process 25:	**The organization regularly measures and analyses organizational performance and provides the information and data to support the organisation's strategic planning process, as well as its operational and functional processes to enable continuous improvement.**
Process 26:	**A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs. Both formal and informal methods- such as surveys, exit interviews and tracking absenteeism and turnover – are used to determine employee well-being, satisfaction, and motivation.**
Process 27:	**The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer purchase, new business, and positive referral. Customer satisfaction measures are used to drive improvement and better understand the factors that drive markets.**

Process 28: **Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.**

Process 29: **Key performance measures embedded in the action plans and are used to systematically track progress towards meeting organizational strategies**

Process 30: **Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information.**

Process 31: **The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.**

Process 32: **The small business captures trends and analyses key measures of:**

* **Operational and service performance such as productivity, cycle time, supplier and partner performance and other appropriate measures of effectiveness and efficiency. These results are compared against industry or best-in-class benchmarks.**
* **Regulatory compliance and environmental improvements. These results are compared against industry or best-in-class benchmarks.**
* **Customer and markets satisfaction and dissatisfaction – such as retention, gains and losses of customers, perceived value of products and services and satisfaction relative to competitors. These results are compared against industry or best-in-class benchmarks.**
* **Financial performance, including aggregate measures of financial return and economic value added, return on investment, operating profit, pre-tax profit margin and/or market share and business growth as appropriate. These results are compared against industry or best-in-class benchmarks.**
* **Employee well-being, satisfaction, development, work-system improvement and effectiveness. These results are compared against industry or best-in-class benchmarks.**

3.7.2 THE NATURE OF THE MEASUREMENT

Measurement in research consists of assigning numbers to empirical events in compliance with a set of rules (Cooper & Emory, 1995:141; Cooper & Schindler, 1998:159). This implies that measurement is a three-part process:

1. Selecting observable empirical events
2. Using numbers or symbols to represent aspects of the event; and
3. Applying a mapping rule to connect the observation of the symbol

(Cooper & Emory, 1995:142)

The characteristics and properties of empirical events can therefore be translated into a form that can be analysed by the researcher (Davis, 2000:166). The procedure for the assignment of numbers (or other symbols) to a property of objects in order to impart some of the characteristics of numbers to the properties in question is called scaling (Cooper and Schindler, 1998:184).

This study used the Likert scaling method. In this method, the statements in the questionnaire express either a favourable or unfavourable attitude towards an object of interest. The respondent is asked to agree or disagree with each statement. Each response is given a numerical score to reflect the degree of attitude favourableness, and the scores may be totalled to measure the respondent's attitude (Cooper and Schindler, 1998:189). In this study, the respondent was asked to indicate the level of importance ascribed to strategic processes and the extent of implementation of these processes in the small business.

This research element is reported in the pilot and final questionnaires in Annexures 1A and 1B.

3.7.3 THE SOUNDNESS OF MEASUREMENT

Essential to any research endeavour, is its credibility; which depends on the soundness of its measurements. According to Cooper and Schindler (1998: 166), the two important characteristics of sound measurement are: validity and reliability. This study carried out processes to ensure the reliability and the validity of the instrument of measurement. The methodology used to ensure these parameters is reported below.

3.7.3.1 VALIDITY

This study was carried out processes to ensure content, criterion-related and construct validity.

- **CONTENT VALIDITY**

This is the extent to which the content of the items provides adequate coverage of the topic under study (Cooper & Schindler, 1998: 167). The literature was consulted and personal interviews were conducted in order to identify elements relevant to strategic processes, small businesses and turbulent environments as well as quality frameworks. According to Cooper & Schindler (1998: 167), other methods that are used to achieve content validity include a judgmental or panel evaluation. This study used an expert panel consisting of academics, pharmacists and small business owners. The proposed questions were submitted the panel and the comments that were received from the panel were used to refine the questionnaire. The most common comments received from the panel were with respect to the re-phrasing of certain questions that could have introduced ambiguity into the measuring instrument. The wording of the questions was adjusted accordingly and the final wording is reflected in the pilot questionnaire in Annexure 1A.

- **CRITERION-RELATED VALIDITY**

According to Durham and Terrblanche (2002:83), criterion-related validity is the degree to which a measure is related to some other standard or criterion that is known to indicate the construct accurately. The measuring instrument used in this study has its genesis in the framework followed the Malcolm Baldrige National Quality Award, described in the literature review in chapter 2.

- **CONSTRUCT VALIDITY**

Construct validity refers to how well the results obtained from the use of the measures fit the theories around which the test is designed (Sekaran, 1992:173). According to Cooper and Schindler (1998:167), the use of factor analysis can determine the construct validity of a measuring instrument. An initial factor analysis (described in the pilot study in Section 3.8) performed on the measuring instrument refined the measuring instrument structure. A further factor analysis (described in the pilot study in Section 3.8) on the refined instrument confirmed

that the factors actually measured the strategic processes of small businesses operating in a turbulent environment.

3.7.3.2 RELIABILITY

Reliability refers to the degree to which measures are free from error and therefore yield consistent results (Zikmund, 2003:300). The Cronbach Alpha test is regarded as useful in indicating reliability (Cooper and Schindler, 1998:171).This study uses the Cronbach Alpha values to test for internal consistency. The high Cronbach Alpha values (described in the pilot study in (Section 3.8) obtained indicates that there will be consistency and homogeneity among the items in the final, refined, measuring instrument.

These research elements are reported in Section 3.8.

3.8 THE PILOT STUDY

The purpose of this pilot study was three fold. The first objective was to evaluate the mechanical aspects (grammar, form content, readability etc.) of the draft questionnaire. The second objective was to determine construct validity of the questionnaire and the third objective was to determine the reliability of the instrument in terms of its internal consistency.

3.8.1 THE PARTICIPANTS

Participants were small business owners who were retail community pharmacists. A total of 10 individuals participated in the pilot study.

3.8.2 THE INSTRUMENT

The draft instrument that was designed in Section 3.7.1 was refined following an evaluation by a panel of six experts, prior to its administration to the respondents of the pilot study. The panel of experts used comprised academics, pharmacists and small business owners.

The pilot questionnaire, attached as Annexure 1A, consisted of four sections. Section 1 solicited demographic information. Items in this section were not part of

the item count, nor were they included in the validation and reliability analyses. Section 2 consisted of 32 questions that were distributed across the following factors: Leadership, Staff Focus, Patients, Other Customers and Markets, Process Management, Measurement and Analysis of Organisational Performance and Organisational Performance Results. Participants used the following 3-point Likert-type scale to indicate their level of importance and extent of implementation of each process: 1 indicated a low level of importance or “not at all” in terms of extent of implementation, 2 indicated a medium level of importance or “sometimes” extent of implementation and 3 indicated a high level of importance or “extensive” extent of implementation.

3.8.3 INSTRUMENT ADMINISTRATION PROCEDURE

Participants were given the pilot questionnaire and they were requested to complete the questionnaire and to write any comments and suggestions to improve the study on the last page. As participants returned the questionnaires, each received a face-to face interview regarding the content, appearance and readability of the items in the questionnaire.

3.8.4 ANALYTICAL PROCEDURES

In this pilot study the dual purpose of the analytical procedures was to determine the construct validity and reliability of the measuring instrument. According to Cooper and Schindler (1998:167), the use of factor analysis can determine the construct validity of a measuring instrument and the Cronbach Alpha test is regarded as useful in indicating reliability (Cooper and Schindler, 1998:171).

3.8.4.1 CRONBACH ALPHA

In this pilot study, the Cronbach Alpha measure was used to test the internal consistency of the questionnaire. According to Davis (2000:183), this technique computes the mean reliability coefficient estimates for all possible ways of splitting a set of items in half. The closer the alpha value is to 1, greater is the internal consistency. The SPSS 11.5 statistical package was used to compute the Cronbach alpha values in this study.

3.8.4.2 FACTOR ANALYSIS

Factor analysis looks for patterns among the variables to discover if an underlying combination of the original variables (a factor) can summarise the original set (Cooper and Schindler, 1998:560).

In factor analysis a correlation matrix is generated from the original set of data (Davis, 2000:482). This can be done in a number of ways, but the most frequently used approach is the principal component analysis approach (Cooper and Schindler, 1998:557). This method transforms a set of variables into a new set of composite variables (or principal components) that are not correlated with each other. These linear combinations of variables, called factors, account for the variance in the data as a whole. The best combination makes up the first factor. The process continues until all the variance is accounted for correlation coefficients between the factor and the variables are called loadings.

The SPSS 11.5 statistical package was used to carry out the factor analyses in this study.

3.8.5 THE RESULTS OF THE PILOT STUDY

3.8.5.1 ALPHA COEFFICIENTS

Results from the reliability analysis for Sections 2A and B showed alpha coefficients ranging from moderate to high in general; with a negative value for one scale [Q2A:Customers and Other Markets, -0.2222] and a low value for one scale[Q2A:Staff Focus, 0.3895]. Summary descriptive statistics and alpha coefficient values for the scales of Sections 2A and 2B are reported in Annexure 2.

3.8.5.2 FACTOR ANALYSIS I

A factor analysis was performed on each section of the questionnaire (Sections 2A and 2B) to ascertain the degree to which the data conformed to the literature and interview – based factors.

The decision of how many factors to extract was based on the Eigen values greater than 1 rule, the scree plot and a visual inspection of the trial solution. The initial analysis was run without specifying how many factors to retain.

For Section 2A, more than one of the variables had a zero variance. Thus, a factor analysis could not be obtained.

For Section 2B, this procedure resulted in 5 factors with Eigen values greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 5. The 5-factor solution was inspected visually and was found to contain interpretable factor patterns.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable factor patterns. The 5-factor solution accounted for 91.121% of the total variance. The eigen values and the results from the rotated matrix are reported in Annexure 3.

The newly defined 5-factors are reported below.

TABLE 5: THE NEWLY DEFINED FACTORS OF SECTION 2B

ITEM (QUESTION)	**FACTOR**
2,9,10,14,15,16,17,22,26,30	STAFF
3,7,8,11,12,13,21,24	LEADERSHIP
25,28,29,31,32	MEASUREMENT
18,19,20,23,27	CUSTOMERS
1,4,5,6	NETWORKS AND SUPPORT SYSTEMS

3.8.5.3 FACTOR ANALYSIS II

The factors and the items in the draft measuring instrument were redefined and adjusted according to the interpretable factors that emerged from the first factor analysis. A second factor analysis and determination of the alpha coefficients were repeated on the refined instrument. The results are reported below.

- **Section 2B**
- **Factor: Leadership**

For Section 2B, Factor: Leadership, the factor analysis resulted in 1 factor with an eigen value greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 1. The 1-factor solution was inspected visually and was found to contain an interpretable item (question) pattern.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable patterns. The 1-factor solution accounted for 77.884% of the total variance. The alpha values, the Eigen values and the results from the rotated matrix are reported in Annexure 5.

- **Section 2B**
- **Factor: Staff**

For Section 2B, Factor: Staff, the factor analysis resulted in 2 factors with an eigen value greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 2. The 2-factor solution was inspected visually and was found to contain an interpretable item (question) pattern.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable patterns. The 2-factor solution accounted for 89.729% of the total variance. The alpha values, the Eigen values and the results from the rotated matrix are reported in Annexure 6.

For the Factor: Staff, the items (questions) that loaded out onto each newly defined sub-factor are reported below.

TABLE 6: THE NEWLY DEFINED SUB-FACTORS OF THE FACTOR STAFF

ITEM (QUESTION)	**FACTOR**
2,9,15,17,22,26,30	KNOWLEDGE, EMPOWERMENT AND MOTIVATION
10,14,16	REWARD

- **Section 2B**
- **Factor :Staff**
- **Sub-Factor: Staff [Knowledge, Empowerment and Motivation]**

For Section 2B, Factor: Staff, Sub-factor: Knowledge, the factor analysis resulted in 1 factor with an Eigen value greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 1. The 1-factor solution was inspected visually and was found to contain an interpretable item (question) pattern.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable patterns. The 1-factor solution accounted for 88.716% of the total variance. The alpha values, the Eigen values and the results from the rotated matrix are reported in Annexure 8.

- **Section 2B**
- **Factor :Staff**
- **Sub-Factor: Staff [Reward]**

For Section 2B, Factor: Staff, Sub-factor: Reward, the factor analysis resulted in 1 factor with an Eigen value greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 1. The 1-factor solution was inspected visually and was found to contain an interpretable item (question) pattern.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable patterns. The 1-factor solution accounted for 90.724% of the total variance. The alpha values, the Eigen values and the results from the rotated matrix are reported in Annexure 9.

- **Section 2B**
- **Factor: Customers**

For Section 2B, Factor: Customers, the factor analysis resulted in 1 factor with an Eigen value greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 1. The 1-factor solution was inspected visually and was found to contain an interpretable item (question) pattern.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable patterns. The 1-factor solution accounted for 80.891% of the total variance. The alpha values, the Eigen values and the results from the rotated matrix are reported in Annexure 10.

- **Section 2B**
- **Factor: Measurement**

For Section 2B, Factor: Measurement, the factor analysis resulted in 1 factor with an eigen value greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 1. The 1-factor solution was inspected visually and was found to contain an interpretable item (question) pattern.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable patterns. The 1-factor solution accounted for 100% of the total variance. The alpha values, the Eigen values and the results from the rotated matrix are reported in Annexure 11.

- **Section 2B**
- **Factor: Networks and Support Systems**

For Section 2B, Factor: Networks and Support Systems, the factor analysis resulted in 1 factor with an Eigen value greater than 1. This was confirmed by a visual inspection of the scree plot which indicated a sudden drop in the scree beginning with factor 1. The 1-factor solution was inspected visually and was found to contain an interpretable item (question) pattern.

The data was subjected to a principal components analysis and principal axis factoring using both varimax and oblique rotations. Principal factor analysis with varimax rotation provided the most interpretable patterns. The 1-factor solution accounted for 77.105 of the total variance. The alpha values, the Eigen values and the results from the rotated matrix are reported in Annexure 12.

3.8.6 DISCUSSION OF RESULTS OF THE PILOT STUDY

Although some of the hypothesized items (questions) that were derived from the literature and the personal interviews merged to create new factors, the results from the factor analyses support the fundamental researcher hypothesized structure of the measuring instrument.

Because more than one variable in Section 2A had a zero variance, a factor analysis of this section could not be obtained. Hence, the factor solution for Section was based on the results for Section 2B. The researcher hypothesized a 6-factor solution for Section 2B, but the factor analyses revealed that a 5-factor solution produced the most interpretable pattern of factor scores, accounting for 91.121% of the common variance in the data set. The scale scores revealed reliability estimates of 0.8688 to 1. The factor staff was sub-divided into two sub-factors, knowledge and reward, accounting for 89.729 % of the variability and with reliability estimates of 0.9625.

3.8.7 LIMITATIONS OF THE PILOT STUDY

The target population, small businesses which are retail community pharmacies, is represented in the profile of the participants of this pilot study. However, the demographic data of the study indicates some limitations to the study's external validity e.g. since the data is derived from established small businesses which are retail community pharmacies, it is possible that if the questionnaire were administered to newer small businesses, or small businesses of different sizes, the factor patterns may vary.

Furthermore, administration to different populations of small business owners may also alter the factor patterns.

3.8.8 CONCLUSIONS OF THE PILOT STUDY

The findings indicate that the questionnaire has satisfactory reliability and validity as the profile of the pilot participants meet the criteria of the research viz. small businesses which are retail community pharmacies. The structure of the measuring instrument determined as valid and reliable for this research study is reflected in table 8 below and is attached in Annexure 1B.

TABLE 7: FACTORS AND ITEMS OF THE PILOT QUESTIONNAIRE

FACTOR	**ITEM (QUESTION)**
2B-STAFF-KNOWLEDGE, EMPOWERMENT AND MOTIVATION	2,9,15,17,22,26,30
2B-STAFF-REWARD	10,14,16
2B-LEADERSHIP	3,7,8,11,12,13,21,24
2B-MEASUREMENT	25,28,29,31,32
2B-CUSTOMERS	18,19,20,23,17
2B-NETWORKS AND SUPPORT SYSTEMS	1,4,5,6

The reliability estimates and common variance for each of the factors of the measuring instrument determined as valid and reliable for this research study is reflected in table 9 below. Each factor represents a process cluster.

TABLE 8: RELIABILITY ESTIMATES AND VARIABILITY OF THE PILOT QUESTIONNAIRE

FACTOR/PROCESS CLUSTER	RELIABILITY ESTIMATE (ALPHA VALUE)	VARIANCE (%)
2B LEADERSHIP	0.9523	77.884
2B STAFF-KNOWLEDGE,EMPOWERMENT AND MOTIVATION	0.9625	88.716
2B STAFF-REWARD	0.9303	90.724
2B CUSTOMERS	0.9359	80.891
2B MEASUREMENT	1	100
2B NETWORKS AND SUPPORT SYSTEMS	0.8688	77.105

3.9 THE FINAL QUESTIONNAIRE

3.9.1 POPULATION AND SAMPLING

According to Cooper and Schindler (1998:219), there are several decisions to consider in securing a sample, such as:

- What is the relevant population?
- What are the parameters of interest?
- What is the type of sample?
- What is the size of the sample needed?

3.9.1.1 THE RELEVANT POPULATION

The definition of a population is generally apparent from the management problem or research question(s) (Cooper and Schindler, 1998:219). In this study the target population comprised of small businesses that are operating in a turbulent environment. Following from the logic of Chapter 2, the sector used as a model is the retail community pharmacy sector. Hence, the target population of this study was the retail community pharmacy sector, which comprised of 2549 retail community pharmacies. . A list of all pharmacies registered with the South African Pharmacy Council was obtained. To specifically target the small business owner, it was clearly stated in the questionnaire that it should only be filled in by those who fitted the definition of a small business viz. a business employing less than 50 workers, assumed to be formally registered, clearly demarcated and paying taxes on a regular basis. Most retail community pharmacies fit this profile.

3.9.1.2 THE PARAMETERS OF INTEREST

Sample statistics are estimators of population parameters. They are the descriptors of the relevant variables computed from sample data and they form the basis of our inferences about the population because they are the best estimates of the population (Cooper and Schindler, 1998:220).

3.9.1.3 THE TYPE OF SAMPLE

Probability sampling is based on the concept of random selection- a controlled procedure that assures that each population element is given a nonzero chance of selection. When each sample is drawn individually from the population at large, it is an unrestricted sample. The unrestricted, simple random sample is the simplest form of probability sampling. Its use enables each population element to have a known and equal chance of selection (Cooper and Schindler, 1998:219). This study used an unrestricted, simple, random, probability sampling approach. The SPSS 11.5 statistical package was used to compute the selection from the database of pharmacies obtained from the South African Pharmacy Council.

3.9.1.4 SIZE OF THE SAMPLE

The size of the sample is a function of the variation in the population parameters under study and the estimating precision needed by the researcher (Cooper and Schindler, 1998:223). Using a confidence level of 95% and a confidence interval of 5, the sample size was determined according to the following formula (programmed into a sample size calculator available at www.surveysystem.com/sscalc.htm,2005):

$$\text{SAMPLE SIZE} = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Where:

Z	=	Z value (e.g. 1.96 for 95% confidence level)
p	=	percentage picking a choice, expressed as a decimal (0.5 used as worst case percentage for sample size needed)
c	=	confidence interval, expressed as a decimal (e.g. 0.05 =+-5)

Correction for a finite population:

$$\text{New ss} = \frac{ss}{1 + \frac{ss-1}{pop}}$$

Where:

ss	=	sample size
pop	=	population

TABLE 9: THE SAMPLE SIZE

CONFIDENCE LEVEL	95%
CONFIDENCE INTERVAL	5 [or expressed as a decimal 0.05]
POPULATION	2549
SAMPLE SIZE NEEDED	**334**

- **CONFIDENCE LEVEL**

The confidence level is the probability of including the population parameter within the confidence interval (Seigel, 1994:795), set in this study at 95%.

- **CONFIDENCE INTERVAL**

The confidence interval is internally computed from the data that has a known probability of including the (unknown) population parameter of interest (Seigel, 1994:795). In this study, since decimal values rather than percentages are used, it is computed to be 0.05. This means that for any parameter being measured in this study, it was extrapolated to the entire relevant population, that measurement would increase or decrease by 0.05. At the 95% confidence level, there would be a 95% chance of this happening.

3.9.2 THE DISTRIBUTION OF THE QUESTIONNAIRE

To account for a 30% non response rate, 482 questionnaires were distributed to the random sample selected. The questionnaire was administered per post and the respondents were requested to return the completed questionnaire in the enclosed self –addressed envelope within two weeks.

A total of 134 completed questionnaires were returned. Of these, 4 questionnaires were incomplete and these were not included in the data analysis. Due to the lower than expected response rate, the confidence interval was re-calculated using the method described in 3.9.1.4, and is reflected in Table 3.

$$\text{SAMPLE SIZE} = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Where:

Z = Z value (e.g. 1.96 for 95% confidence level)

p = percentage picking a choice, expressed as a decimal (0.5 used as worst case percentage for sample size needed)

c = confidence interval, expressed as a decimal (e.g. 0.05 =+-5)

Correction for a finite population:

$$\text{New ss} = \frac{ss}{1 + \frac{ss-1}{pop}}$$

Where:

ss = sample size

pop = population

TABLE 10: NEW SAMPLE SIZE

CONFIDENCE LEVEL	95%
SAMPLE SIZE	130
POPULATION	2549
NEW CONFIDENCE INTERVAL	**8 [or expressed as a decimal 0.08]**

The new confidence interval, due to the lower than expected response rate of the returned questionnaires, is 0.08. This indicates that for any parameter being measured in this study, it was extrapolated to the entire relevant population, the measurement obtained in the sample would increase or decrease by 0.08. At the 95% confidence level, there would be a 95% chance of this happening.

3.9.3 THE PREPARATION OF THE DATA

Once the questionnaires were returned, they were prepared for analysis. This involved editing, coding and entering the data (Cooper and Schindler: 1998:411).

- **Editing the Data**

Editing detects errors and omissions, corrects them when possible and certifies that minimum data quality standards are achieved (Cooper and Schindler: 1998:411). In this study, the data was edited by the separation of the incomplete questionnaires from the completed ones. Since this study comprised of anonymous respondents, the respondents who sent in incomplete questionnaires could not be contacted. Therefore, these questionnaires were discarded. In this study 4 questionnaires were returned incomplete. These were discarded.

- **Coding the Data**

Coding involves applying a set of rules to the data to transform information from one form to another (Durrheim and Terreblanche, 2002:98). In this study this involved converting each questions to a numeric symbol to allow for the quantitative analysis using the SPSS 11.5 statistical programme. The responses were already in the Likert scale format; therefore no coding of the responses was necessary.

- **Entering the Data**

The data obtained from the questionnaires was captured and analysed statistically using the SPSS 11.5 statistical software package.

These research elements are reported in Chapter 4.

3.9.4 THE ANALYSIS OF THE DATA

The purpose of any analytical method is to convert data into information needed to make decisions (Davis, 2000:386). This study uses both descriptive and inferential statistical tools.

3.9.4.1 DESCRIPTIVE STATISTICS

In this study, the descriptive statistics used were means and standard deviations. The means, measuring the central tendency were used to determine the average response of respondents towards a test. The mean (the arithmetic mean) is the sum of the observed values in the distribution divided by the number of observations. The standard deviation is the positive square root of the variance. It improves interpretability by removing the variance's square and expressing deviations in their original units (Cooper and Schindler: 1998:427).

3.9.4.2 INFERENTIAL STATISTICS

Since the research study's interest goes beyond the mere description of the samples obtained, the use of inferential analysis allows the drawing of conclusions about the population itself. Terreblanche and Durrheim (2002:117) and Collis and Hussey (2003:196), state that inferential analysis allows the drawing of conclusions about the population based on data obtained from samples. In this study, the inferential statistics used included the Cronbach Alpha, the Factor Analysis, and paired t-tests.

- **The Cronbach Alpha**

The Cronbach Alpha measure was used to test the internal consistency of the questionnaire. According to Davis (2000:183), this technique computes the mean reliability coefficient estimates for all possible ways of splitting a set of items in half. The closer the alpha value is to 1, greater is the internal consistency. The SPSS 11.5 statistical package was used to compute the Cronbach alpha values in this study.

- **The Factor Analysis**

Factor analysis looks for patterns among the variables to discover if an underlying combination of the original variables (a factor) can summarise the original set (Cooper and Schindler, 1998:560).

In factor analysis a correlation matrix is generated from the original set of data (Davis, 2000:482). This can be done in a number of ways, but the most frequently used approach is the principal component analysis approach (Cooper and Schindler, 1998:557). This method transforms a set of variables into a new set of composite variables (or principal components) that are not correlated with each other. These linear combinations of variables, called factors, account for the variance in the data as a whole. The best combination makes up the first factor. The process continues until all the variance is accounted for correlation coefficients between the factor and the variables are called loadings. The SPSS 11.5 statistical package was used to carry out the factor analyses in this study.

- **Paired t-tests**

To achieve the research purpose, the research objectives and satisfy the research propositions, this study performed a gap analysis between level of importance and extent of implementation for all the identified strategic processes or dynamic capabilities. Since this involved the determination of the significance of the difference between two variables that were both provided by the same set of respondents, the use of a paired t-test thus provided the best test of statistical significance.

The t-test focuses on the difference between each pair of the scores, this controls for variance in both measures from one respondent to the next. Paired t-tests are used to compare the means of two variables for a single group. The procedure computes the differences between values of the two variables for each case and tests whether the average differs from zero. (Prism, 2005 and NCL, 2005).

A statistically significant difference in any gap between level of importance and extent of implementation was recorded where the p-value was computed to be less than 0.05. If the p-value is small, it means that the pairs are significantly correlated, the Pearson correlation coefficient, r, is positive, the t-ratio [the mean of the differences divided by the standard error of the differences] is large and it is unlikely that the effect observed is a coincidence of random sampling and the

effect, which in this study is the gap between level of importance and extent of implementation, is statistically significant (Prism, 2005).

The t-test assumes a normal distribution of the differences and the Kolmogorov-Smirnov statistic was used to test for this assumption throughout. If the K-S value is greater than 0.5, then normality is assumed (Norusis, 1995 and Coake and Steed, 1996). The SPSS 11.5 statistical package was used to carry out the t-tests in this study.

These research elements are reported in Chapter 4.

3.9.5 THE STRATEGIC PROCESSES FOR THE FINAL QUESTIONNAIRE

The strategic processes to be incorporated as questions in the final questionnaire are illustrated in Table 11 below:

TABLE 11: THE STRATEGIC PROCESSES FOR THE FINAL QUESTIONNAIRE

Process 1
The leadership of a small business, through both formal [e.g. defined and structured] and informal [e.g. observation] methods, fosters staff empowerment and innovation.
Process 2
The leadership of a small business allows the business to co-evolve by fostering, driving and executing multi-business/multi-unit collaborative linkages and managing group dynamics while at the same time empowering staff.
Process 3
Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower staff and further entrench the organizational culture.
Process 4
Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.
Process 5
The skills, knowledge, values and attitudes of the staff and leadership are important, relevant, valuable and available to customers.
Process 6
A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.
Process 7
Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information.

Process 8

The leadership of a small business leads with an impelling strategic focus while allowing and rewarding organizational members for being active players in the strategic process. While staff are encouraged and rewarded for experimenting, taking risks and being creative, the small business leadership at the same time retains control of the overall goals of the firm.

Process 9

Key human resource plans are derived from and linked to the overall business strategy with respect to compensation, benefits and recruitment.

Process 10

Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.

Process 11

The leadership of a small business serves as a role model for the organisation and all stakeholders.

Process 12

The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.

Process 13

The leadership of a small business ensures that the design of key healthcare services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.

Process 14

The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available.

Process 15

The leadership of a small business develops strategies that are clearly translated into action plans that support the achievement of organizational objectives. Strategies are linked to resources, implementation procedures and defined performance measures.

Process 16

The leadership of a small business knows what resources [e.g. human, financial, physical, support] are available to the business; their constraints, their capacities and their advantages.

Process 17

The leadership of a small business devises appropriate strategies that can maximize any resource advantage and overcome any resource limitation.

Process 18

The leadership of small businesses ensures that personalized service is offered to customers

Process 19

The organization regularly measures and analyses organizational performance to provide the information and data to support the organization's strategic planning process, as well as its operational and functional processes to enable continuous improvement.

Process 20

Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.

Process 21

Key performance measures embedded in the action plans and are used to systematically track progress towards meeting organizational strategies.

Process 22

The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.

Process 23

All measures of organizational performance captured by the small business are compared against industry or best-in-class benchmarks.

Process 24

There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.

Process 25

A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analyzed as a source of improvement activities.

Process 26

Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.

Process 27

The design of key healthcare services and the service delivery process is addressed systematically accounting for changing customer requirements.

Process 28

The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business and positive referral.

Process 29

The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities,

Process 30

The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.

Process 31

The leadership of a small business has strong friend, family and professional networks.

Process 32

The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes

3.10 THE CHAPTER CONCLUSIONS

This chapter described the research stages and the elements of the research process, focusing on the primary data collection methodology, both qualitative and quantitative and the method that was used in the process of theory building and proposition development. It also explained how the instrument was designed, the nature of measurement, the soundness of measurement, the pilot study, the population and sampling methods, the data preparation and the data analysis methods.

The next chapter is the quantitative data analysis and results chapter, where the study results will be presented.

CHAPTER FOUR

THE

QUANTITATIVE DATA ANALYSIS

AND RESULTS

CHAPTER 4: THE QUANTITATIVE DATA ANALYSIS AND RESULTS

4.1 THE CHAPTER SUMMARY

The aims of this chapter were to present and analyse the data.

This chapter commenced with reliability and validity testing on the data obtained from the final questionnaire, using the Cronbach Alpha values and factor analysis methods described in Chapter 3. This chapter then indicated that the factors loaded out onto a six factor solution, viz. staff-knowledge empowerment and motivation, staff-reward, leadership, measurement, customers and networks and support systems. The leadership factor loaded out onto two separate sub-factors, leadership - general and leadership – new. This chapter termed each factor, a process cluster. The reliability estimates for each process cluster ranged from moderate to high, indicating a moderate to high internal consistency in the final questionnaire.

The data analysis in this chapter was approached in a stepwise manner, with an initial general analysis of all process clusters and processes. This was followed by an analysis of the importance /implementation gap in process clusters and finally an analysis of the importance/implementation gap in all processes.

4.2 INTRODUCTION

This chapter deals with the analysis and presentation of the empirical data. However before analysing the data, reliability and validity tests were performed on the data obtained from the final questionnaire, using the Cronbach Alpha values and factor analysis methods described in Section 3.8.

To analyse the data obtained estimators of population means based on the simple random sample were developed to enable the identification and description of the strategic processes in small businesses operating in a turbulent environment as well as the determination of both the level of importance of these strategic processes to these small firms and their extent of their implementation therein. The performance of a trend analysis further described the strategic processes of small businesses operating in a turbulent environment. Paired t-tests on combinations of the variables importance and implementation were also performed to enable the identification any significant differences between them.

Finally, the means of the aggregated data, where a significant difference is found between the variables, importance and implementation, were plotted on scalar charts to describe how small businesses operating in a turbulent environment allocate their resources. The decision to plot only the aggregated data in instances where there is no significant difference between the variables arose from the discussion in section 1.4, Chapter 1 where it was pointed out that where there is a significant difference between importance and implementation of processes, this indicates that resource allocation and hence process implementation is not dependant on the importance perception, but rather on scarce resources. Since small businesses operate in a resource impoverished and resource constrained environment, it how these resources are allocated that will determine any innovative resource reconfigurations that can lead to value –adding strategies and competitive advantage.

The above approach to the analysis of the data in this study is arranged into four steps, with a preliminary data validation stage.

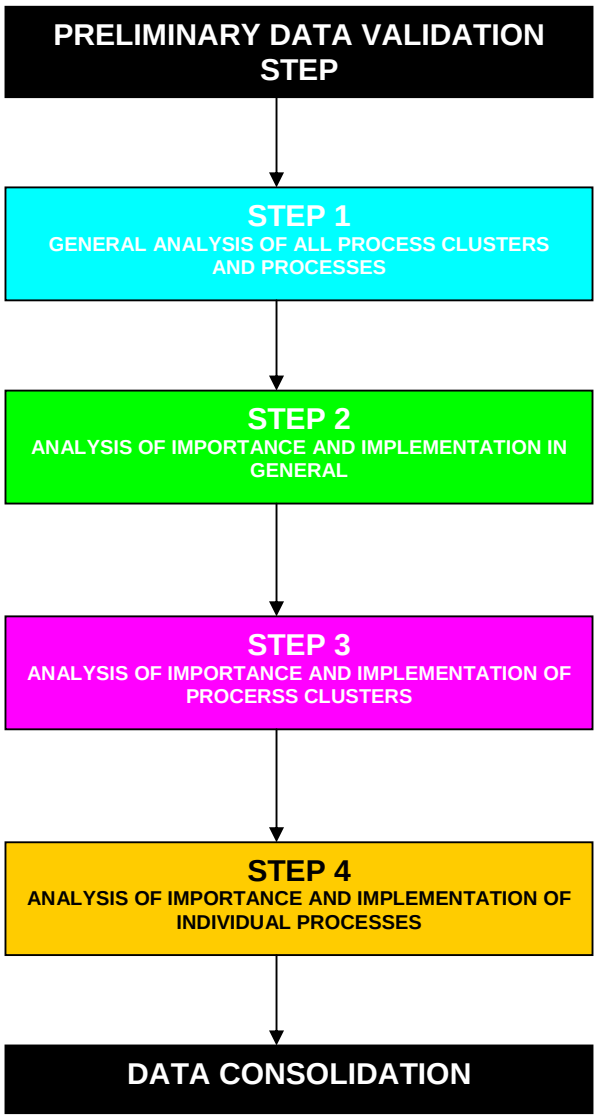


FIGURE 16: DATA ANALYSIS STEPS

4.3 THE RELIABILITY AND VALIDITY OF THE FINAL QUESTIONNAIRE

Prior to the analysis of the data obtained from the returned questionnaires, a determination of the Cronbach Alpha values and a factor analysis was carried using the methods described in the pilot study. As in the pilot study, more than one item in Section 2A had a zero variance and thus a factor analysis could not be obtained for Section 2A. For Section 2B, the items (questions) that loaded onto each factor are summarized below. The leadership factor loaded out onto two separate sub-factors: Leadership-General and Leadership-Turbulence.

TABLE 12: FACTORS AND ITEMS OF THE FINAL QUESTIONNAIRE

FACTOR/PROCESS CLUSTER	**ITEM/PROCESS/QUESTION**
2B-STAFF-KNOWLEDGE, EMPOWERMENT AND MOTIVATION	1,2,3,4,5,6,7
2B-STAFF-REWARD	8,9,10
2B-LEADERSHIP **Sub-Factors** LEADERSHIP – GENERAL LEADERSHIP - TURBULENCE	11,12,13,14,15,16,17,18 11,13,15,16,17,18 12,14
2B-MEASUREMENT	19,20,21,22,23
2B-CUSTOMERS	24,25,26,27,28
2B-NETWORKS AND SUPPORT SYSTEMS	29,30,31,32

The reliability estimates and common variance for each of the factors of the final measuring instrument (Annexure 1B), are reported in Annexure 13 and summarized below.

TABLE 13: RELIABILITY ESTIMATES AND VARIABILITY OF THE FINAL QUESTIONNAIRE

FACTOR/PROCESS CLUSTER	RELIABILITY ESTIMATE (ALPHA VALUE)	VARIANCE (%)
2B STAFF-KNOWLEDGE,EMPOWERMENT AND MOTIVATION	0.8642	60.503
2B STAFF-REWARD	0.8066	72.211
2B LEADERSHIP	0.9115	63.612
SUB-FACTORS		
LEADERSHIP-GENERAL	0.9248	74.532
LEADERSHIP-TURBULENCE	0.7711	81.373
2B MEASUREMENT	0.9343	80.415
2B CUSTOMERS	0.8323	61.385
2B NETWORKS AND SUPPORT SYSTEMS	0.9379	84.496

4.4 IMPORTANCE AND IMPLEMENTATION

4.4.1 THE IMPORTANCE OF STRATEGIC PROCESS CLUSTERS AND STRATEGIC PROCESSES

Annexure 14 reports the mean for each process cluster and for each process individually. These are summarized below.

TABLE 14: ALL PROCESS CLUSTERS FROM THE HIGHEST TO THE LOWEST [IMPORTANCE]

PROCESS CLUSTER	**MEAN**
MEASUREMENT **[M]**	2.84
STAFF-KNOWLEDGE,MOTIVATION AND EMPOWERMENT **[SK]**	2.81
LEADERSHIP-TURBULENCE **[LT]**	2.80
LEADERSHIP-GENERAL **[LG]**	2.78
CUSTOMERS **[C]**	2.64
NETWORKS **[N]**	2.45
STAFF – REWARD **[SR]**	2.30

TABLE 15: THE HIGHEST AND THE LOWEST PROCESSES [IMPORTANCE]

PROCESS	**MEAN**
Q22,Q21, Q18, Q12	3.00
Q10,Q32	2.20

The means are provided at the 95% confidence level with a 0.08 confidence level. Thus, for the population of this study, it can be said with 95% certainty that each mean would apply in the range of 0.08 more or 0.08 less than the sample mean.

4.4.2 THE IMPLEMENTATION OF STRATEGIC PROCESS CLUSTERS AND STRATEGIC PROCESSES

Annexure 15 reports the mean for each process cluster and for each process individually. The highest and lowest scoring items, in general and for different age and size bands, are summarized below.

TABLE 16: ALL PROCESS CLUSTERS FROM THE HIGHEST TO THE LOWEST [IMPLEMENTATION]

PROCESS CLUSTER AND PROCESSES	MEAN
NETWORKS	2.58
STAFF-KNOWLEDGE,MOTIVATION AND EMPOWERMENT	2.53
STAFF - REWARD	2.29
CUSTOMERS	2.20
MEASUREMENT	1.97
LEADERSHIP-GENERAL	1.89
LEADERSHIP-TURBULENCE	1.83

TABLE 17: THE HIGHEST AND THE LOWEST PROCESSES [IMPLEMENTATION]

PROCESSES	MEAN
Q6,Q5,Q4	2.80
Q14	1.82

The means are provided at the 95% confidence level with a 0.08 confidence level. Thus, for the population of this study, it can be said with 95% certainty that each mean would apply in the range of 0.08 more or 0.08 less than the sample mean.

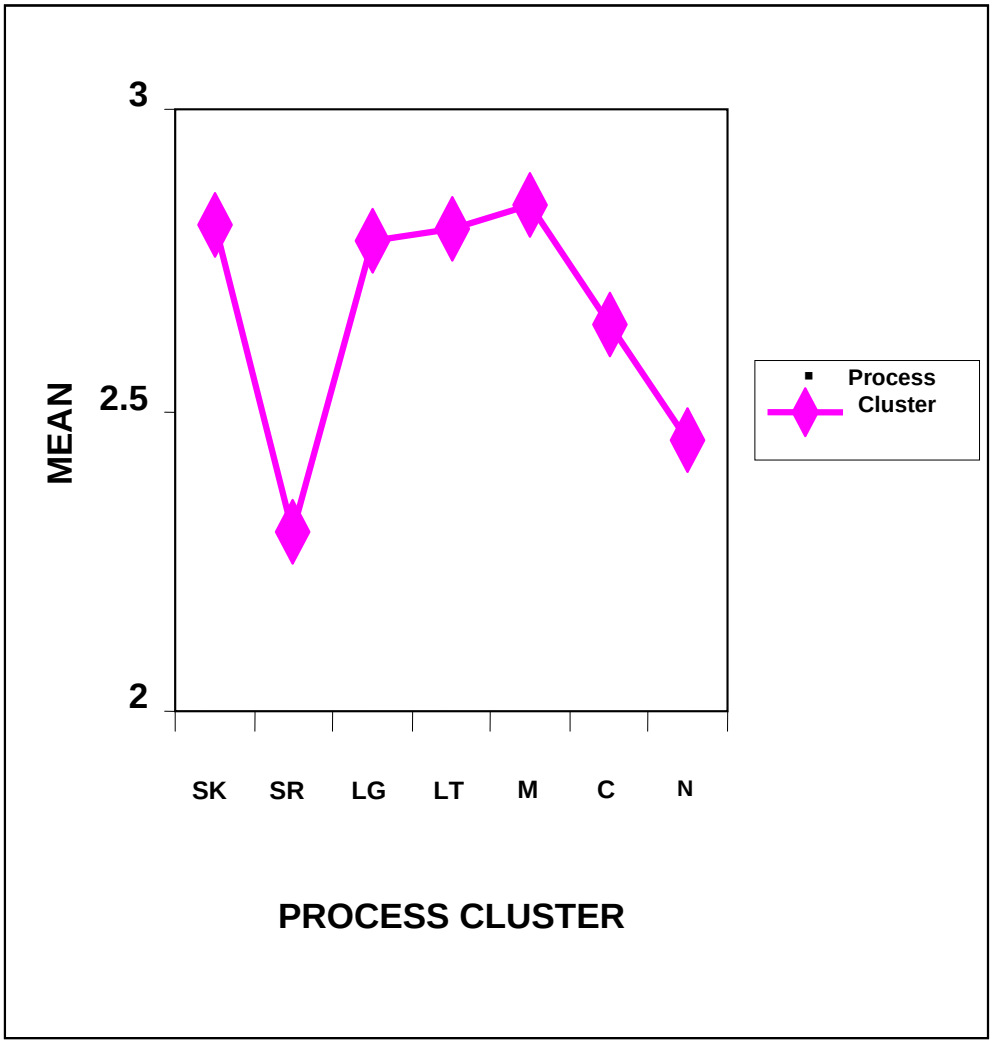
The means are provided at the 95% confidence level with a 0.08 confidence level. Thus, for the population of this study, it can be said with 95% certainty that each mean would apply in the range of 0.08 more or 0.08 less than the sample mean.

4.4.3 TREND ANALYSIS

The means are provided at the 95% confidence level with a 0.08 confidence level. Thus, for the population of this study, it can be said with 95% certainty that each mean would apply in the range of 0.08 more or 0.08 less than the sample mean.

4.4.3.1 THE IMPORTANCE OF PROCESS CLUSTERS

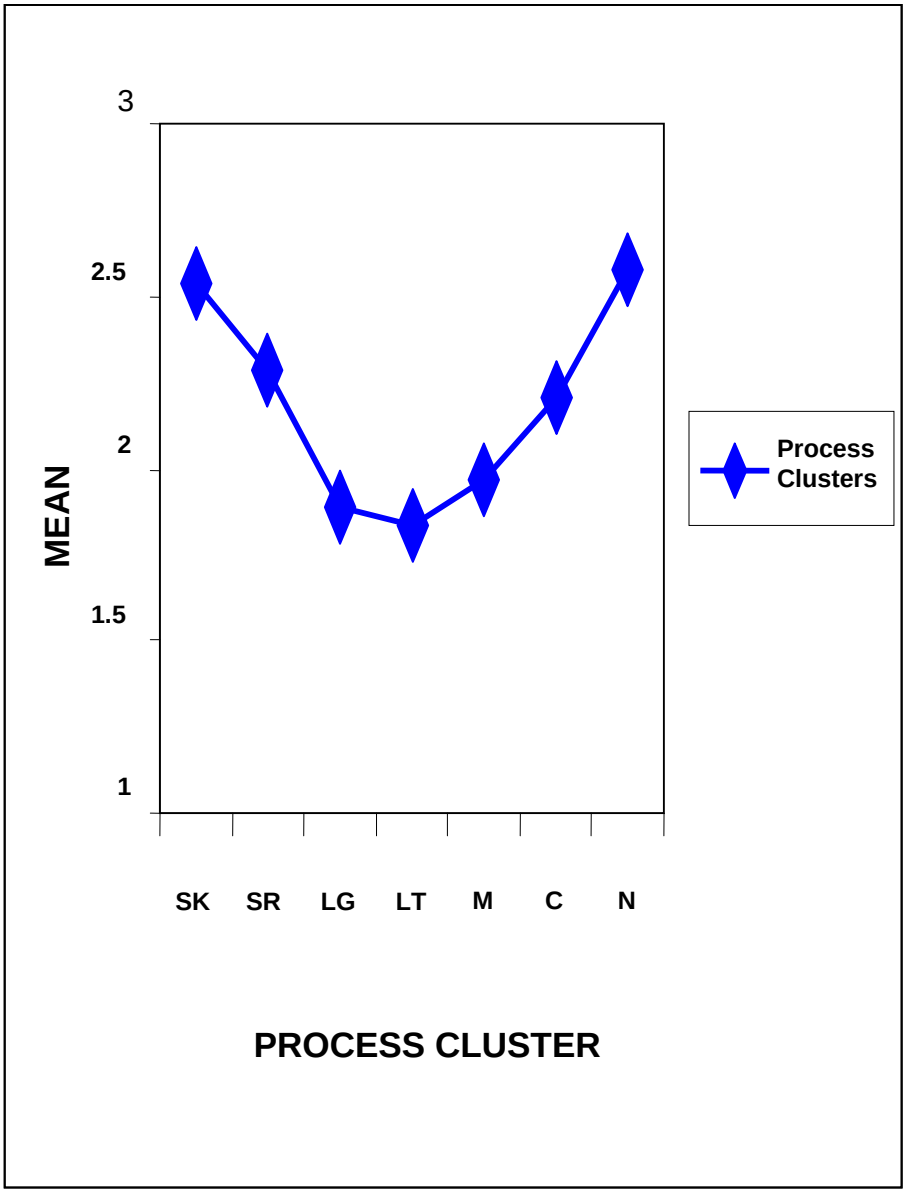
The results of the trend analysis are reported in Annexure 16 and the graph is shown below.



GRAPH 1: THE IMPORTANCE OF PROCESS CLUSTERS

4.4.3.2 THE IMPLEMENTATION OF PROCESS CLUSTERS

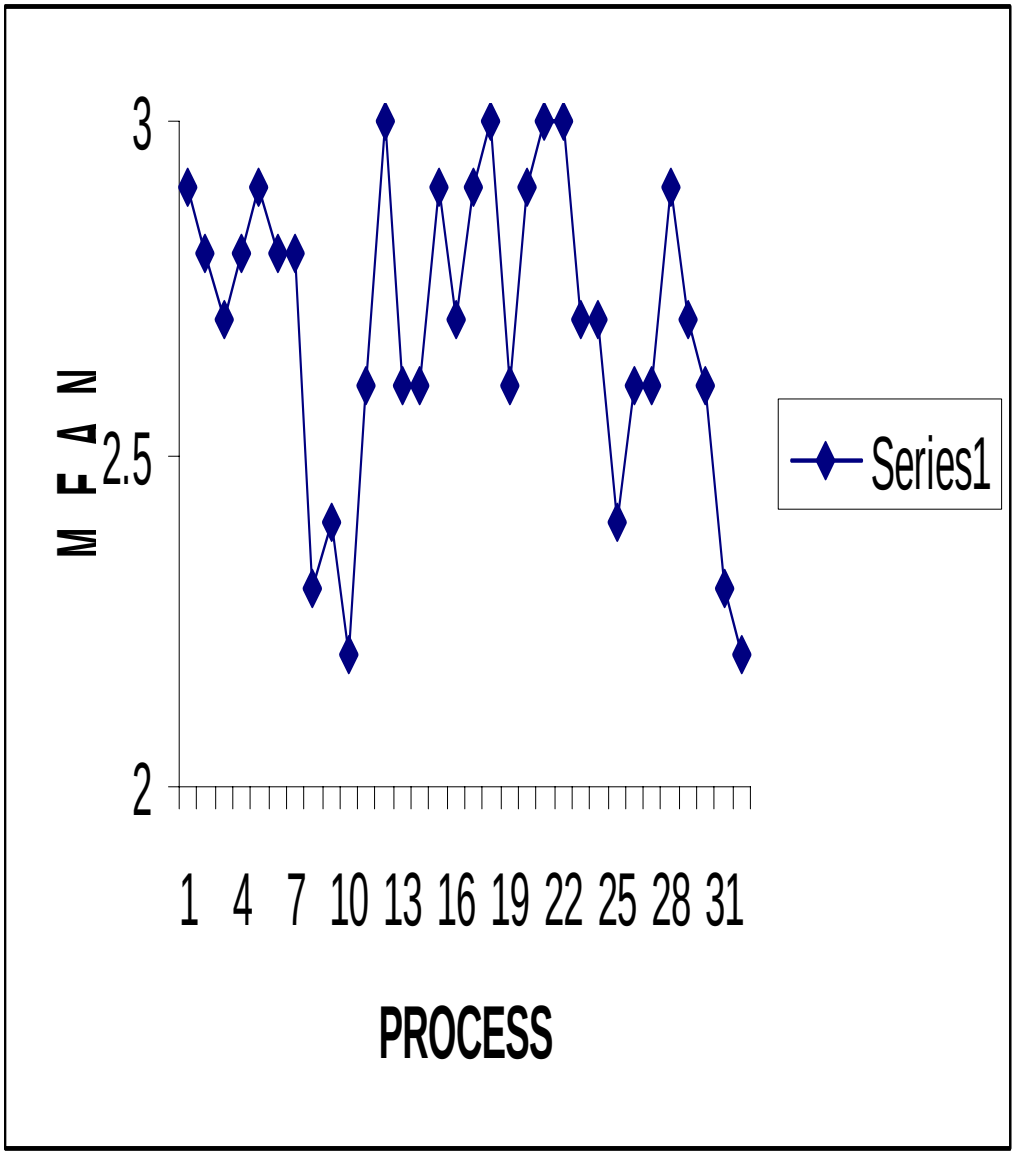
The results of the trend analysis are reported in Annexure 16 and the graph is shown below.



GRAPH 2: THE IMPLEMENTATION OF PROCESS CLUSTERS

4.4.3.3 THE IMPORTANCE OF INDIVIDUAL PROCESSES

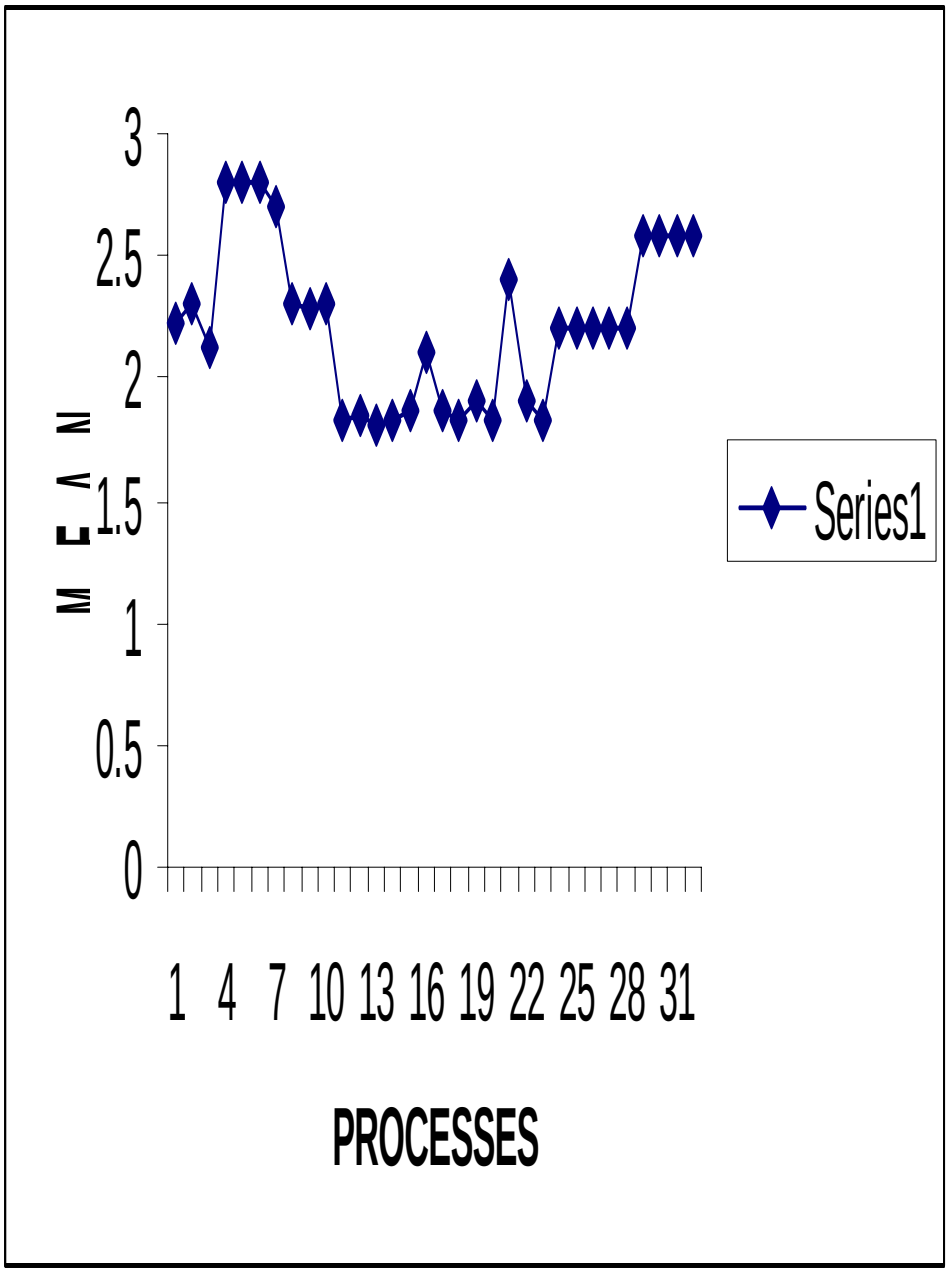
The results of the trend analysis are reported in Annexure 16 and the graph is shown below.



GRAPH 3: THE IMPORTANCE OF INDIVIDUAL PROCESSES

4.4.3.4 THE IMPLEMENTATION OF INDIVIDUAL PROCESSES

The results of the trend analysis are reported in Annexure 16 and the graph is shown below.



GRAPH 4: THE IMPLEMENTATION OF INDIVIDUAL PROCESSES

4.5 THE IMPORTANCE/ IMPLEMENTATION GAP

A gap analysis was performed between the perceived level of importance and extent of implementation of the process clusters and the individual processes. This involved determining the significance of the difference between the two variables that are being examined. Therefore a paired t-test was used to provide the best test of statistical significance. Since a requirement for the use of the t-test is a normal distribution, the Kolmogorov-Smirnov (K-S) statistic was calculated to determine the normality of distribution of the data being analysed. A K-S statistic that is greater than 0.5 indicates a normal distribution. For a significant difference between the variables a p value of < 0.05 is required.

The means are provided at the 95% confidence level with a 0.08 confidence level. Thus, for the population of this study, it can be said with 95% certainty that each mean would apply in the range of 0.08 more or 0.08 less than the sample mean.

4.5.1 GAP ANALYSIS OF IMPORTANCE AND IMPLEMENTATION IN GENERAL

The results of the paired samples test and the Kolmogorov-Smirnov test are reported in Annexure 17 and summarised below.

TABLE 18: IMPORTANCE AND IMPLEMENTATION IN GENERAL

VARIABLE	MEAN	K-S Statistic
Importance	2.66	0.762
Implementation	2.18	0.502

The K-S statistics are greater then 0.5 for each variable. This indicates that the data is distributed normally.

The significance of the gap between the variables, importance and implementation, is reflected in the p value of 0.030, which is less than 0.05.

4.5.2 GAP ANALYSIS OF PROCESS CLUSTERS

The results of the paired samples test and the Kolmogorov-Smirnov test are reported in Annexure 18 and summarised below.

TABLE 19: GAP ANALYSIS OF PROCESS CLUSTERS

PROCESS CLUSTER	**SIGNIFICANCE**
STAFF-KNOWLEDGE, MOTIVATION AND EMPOWERMENT	0.000
STAFF-REWARD	**0.867**
LEADERSHIP-GENERAL	0.000
LEADERSHIP-TURBULENCE	0.000
MEASUREMENT	0.000
CUSTOMERS	0.000
NETWORKS	0.029

The K-S statistic is greater then 0.5 for each factor. This indicates that the data is distributed normally for each factor.

The significance of the gap in the variables of all process clusters except staff-reward is reflected in p values that are less than 0.05. The lack of significance of the gap in the variables of the process cluster staff-reward is reflected in a p value that is greater than 0.05.

The data of the process cluster that showed no significant gap between the variables are reported in Annexure 18 and summarised below.

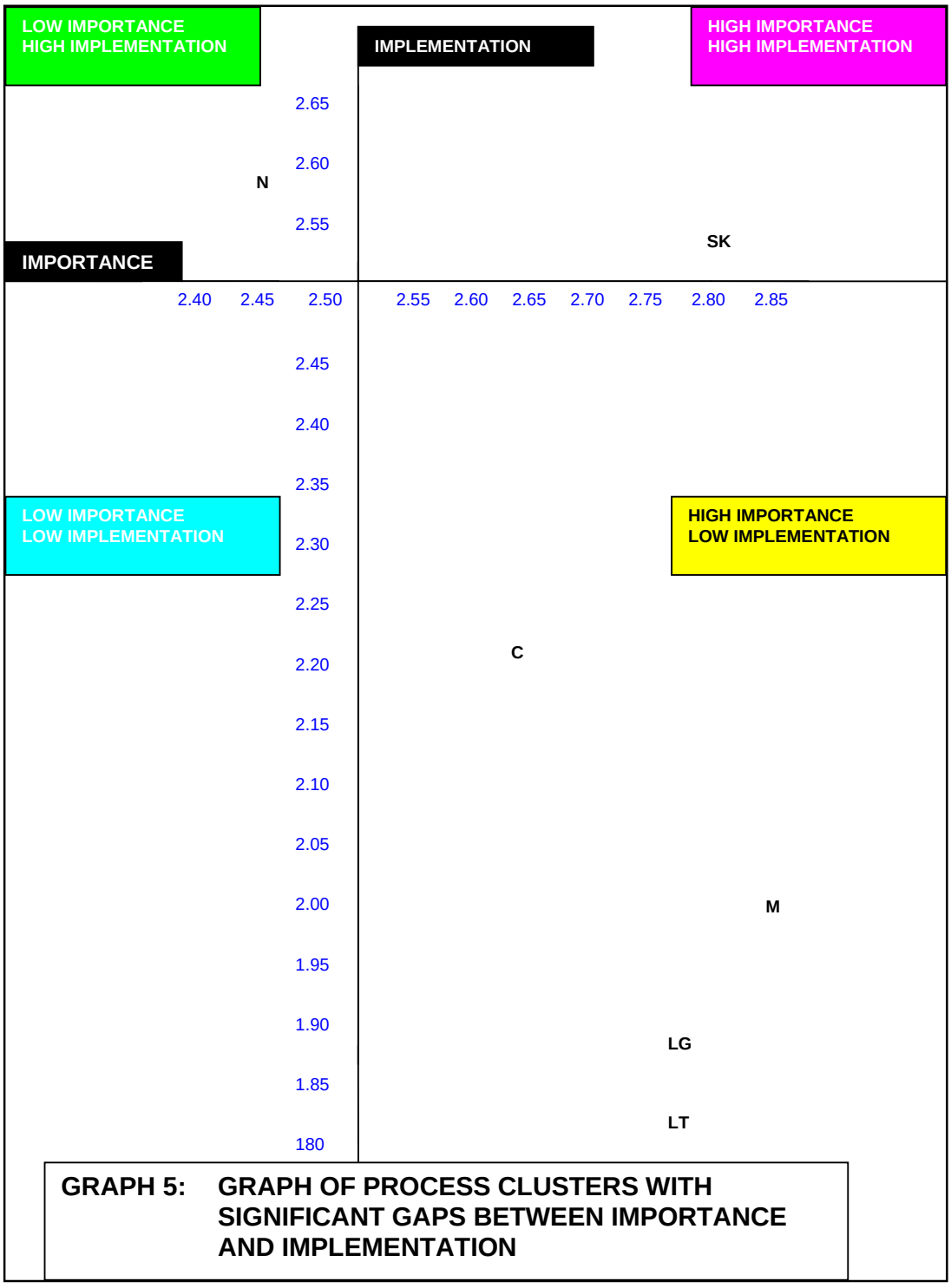
TABLE 20: MEAN, AGGREGATED RESPONSES OF THE PROCESS CLUSTERS WITH NO SIGNIFICANT GAPS BETWEEN IMPORTANCE AND IMPLEMENTATION

PROCESS CLUSTER	**IMPORTANCE**	**IMPLEMENTATION**
STAFF-REWARD **[SR]**	2.30	2.29

The data of the process clusters that showed a significant gap between the variables was normalised and the mean of the aggregates were plotted on a scalar chart. The results are reported in Annexure 18 and summarised below together with the scalar chart.

TABLE 21: MEAN, AGGREGATED RESPONSES OF THE PROCESS CLUSTERS WITH SIGNIFICANT GAPS BETWEEN IMPORTANCE AND IMPLEMENTATION

PROCESS CLUSTER	**IMPORTANCE**	**IMPLEMENTATION**
STAFF-KNOWLEDGE, MOTIVATION AND EMPOWERMENT **[SK]**	2.81	2.53
LEADERSHIP-GENERAL **[LG]**	2.78	1.89
LEADERSHIP-TURBULENCE **[LT]**	2.80	1.83
MEASUREMENT **[M]**	2.84	1.97
CUSTOMERS [C]	2.64	2.20
NETWORKS AND SUPPORT SYSTEMS **[N]**	2.45	2.58



GRAPH 5: GRAPH OF PROCESS CLUSTERS WITH SIGNIFICANT GAPS BETWEEN IMPORTANCE AND IMPLEMENTATION

4.5.3 GAP ANALYSIS OF INDIVIDUAL PROCESS

The results of the paired samples test and the Kolmogorov-Smirnov test are reported in Annexure 19 and summarised below.

TABLE 22: GAP ANALYSIS OF INDIVIDUAL PROCESS

PROCESS	SIGNIFICANCE
1	0.000
2	0.000
3	0.000
4	1.000
5	0.027
6	1.000
7	0.107
8	1.000
9	0.002
10	0.090
11	0.000
12	0.000
13	0.000
14	0.000
15	0.000
16	0.000
17	0.000
18	0.000
19	0.000
20	0.000
21	0.000
22	0.000
23	0.000
24	0.000
25	0.000
26	0.000
27	0.000
28	0.000
29	0.059
30	0.730
31	0.00
32	0.00

The K-S statistic is greater then 0.5 for each process with variance. This indicates that the data is distributed normally.

The significance of the gap in the variables of all processes except processes 4,6,7,8,10,29,30 is reflected in p values that are less than 0.05. The lack of significance of the gap in variables of the processes 4,6,7,8,10,29,30 is reflected in a p value that is greater than 0.05.

The data of the process cluster that showed no significant gap between the variables are reported in Annexure 19 and summarised below.

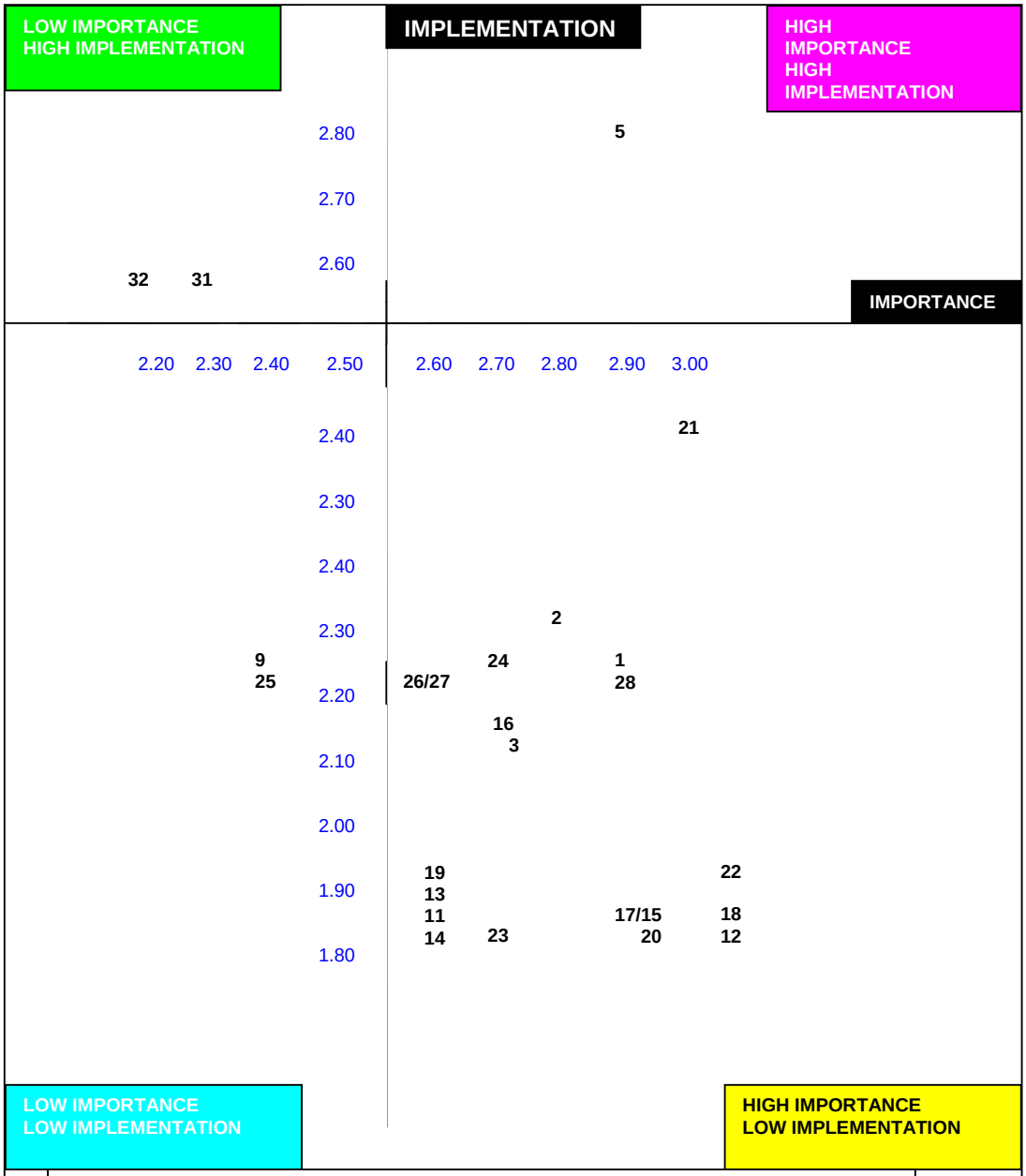
TABLE 23: MEAN AGREGATED RESPONSES OF ALL PROCESSES WITH NO SIGNIFICANT GAPS BETWEEN IMPORTANCE AND IMPLEMENTATION

PROCESS	IMPORTANCE	IMPLEMENTATION
4	2.80	2.80
6	2.80	2.80
7	2.80	2.70
8	2.30	2.30
10	2.20	2.31
29	2.70	2.58
30	2.60	2.58

The data was normalised and the mean of the aggregates of those processes that showed a significant gap between the variables were plotted on a scalar chart. The results are reported in Annexure 19 and summarised below together with a scalar chart.

TABLE 24: MEAN AGREGATED RESPONSES OF ALL PROCESSES WITH SIGNIFICANT GAPS BETWEEN IMPORTANCE AND IMPLEMENTATION

PROCESS	IMPORTANCE	IMPLEMENTATION
1	2.90	2.22
2	2.80	2.30
3	2.70	2.12
5	2.90	2.80
9	2.40	2.26
11	2.60	1.83
12	3.00	1.84
13	2.60	1.88
14	2.60	1.82
15	2.90	1.86
16	2.70	2.11
17	2.90	1.86
18	3.00	1.83
19	2.60	1.91
20	2.90	1.83
21	3.00	2.41
22	3.00	1.91
23	2.70	1.83
24	2.70	2.21
25	2.40	2.20
26	2.60	2.20
27	2.60	2.20
28	2.90	2.20
31	2.30	2.58
32	2.20	2.58



GRAPH 6: GRAPH OF PROCESSES WITH SIGNIFICANT GAPS BETWEEN IMPORTANCE AND IMPLEMENTATION

4.6 CHAPTER CONCLUSIONS

This chapter presented and analysed the data, which will be discussed in the following chapter.

CHAPTER FIVE

DISCUSSION

OF

RESULTS

CHAPTER 5: DISCUSSION OF RESULTS

5.1 CHAPTER SUMMARY

The aims of this chapter were to discuss the results obtained in Chapter 4

This chapter commenced with a quantitative description of the level of importance and extent of implementation of each process cluster and each individual process using a comparison of the means of the results obtained and through a trend analysis of these means. For the strategic process clusters, this chapter found that these small businesses considered measurement to be the most important strategic process cluster; while staff-reward was found to be the least important strategic process cluster. On the other hand networks and support systems was found to be the most implemented strategic process cluster with leadership-turbulence the least implemented process cluster.

For the individual processes, in terms of importance, this chapter found that processes 12, 18, 21 and 22 were the most important processes, while processes 10 and 32 were the least important processes. For the individual processes, in terms of implementation, this chapter found that processes 4, 5 and 6 were the most implemented processes, while process 14 was the least implemented process.

In the second step, this chapter analysed importance and implementation in general and found that there was a significant gap between level of importance and extent of implementation of the processes in general.

In the third step, this chapter analysed the importance and implementation of process clusters and found that staff-reward was the only process cluster with no significant gap between level of importance and extent of implementation, indicating that the extent of implementation, and by extension the resource allocation, to this process cluster could be influenced by a change in the importance perception, and by extension the management capabilities of small businesses operating in a turbulent environment.. This step also indicated that the other process clusters were dependant on a change in the general resource base of the small firm for any change in the extent of implementation of these process clusters.

In the fourth step, this chapter analysed the importance and implementation of all processes and found that processes 4, 6,7,8,10,29 and 30 showed no significant

gap between level of importance and extent of implementation, indicating that the extent of implementation, and by extension the resource allocation to these processes could be influenced by a change in the importance perception, and by extension the management capabilities of small businesses operating in a turbulent environment. This step also indicated that the other processes were dependant on a change in the general resource base of the small firm for any change in the extent of implementation of these processes.

5.2 INTRODUCTION

In this chapter the data will be analysed and discussed in order to achieve the research purpose, the research objectives and to investigate the research propositions. The achievement of this will satisfy the research purpose.

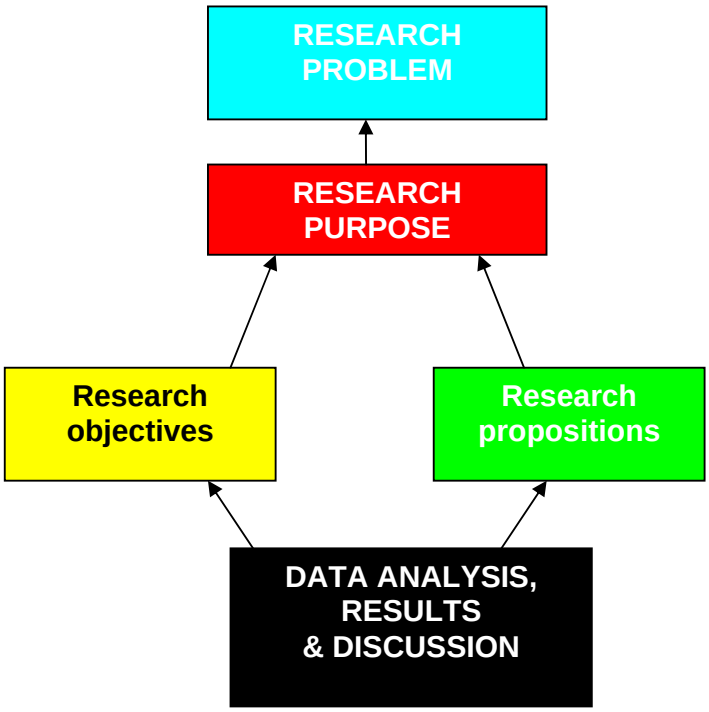


FIGURE 17: DATA ANALYSIS, RESEARCH OBJECTIVES, RESEARCH PROPOSITIONS, RESEARCH PURPOSE AND RESEARCH PROBLEM

In summary, the research purpose, the research objectives and the research propositions of this study are:

5.2.1 THE PURPOSE OF THE STUDY

In order to achieve the envisaged solution to the research problem of this study, the main purpose of the research is to investigate the strategic processes of small businesses operating in a turbulent environment. The core elements of this purpose comprises of:

1. The conceptual identification and the separation of dynamic capabilities into those processes that are reconfiguration enabling processes and those processes that are reconfiguration processes.

2. The conceptualisation of strategic processes or dynamic capabilities with a specific set of measurable “best practice” processes that capture and incorporate the idea of strategic processes or dynamic capabilities while being grounded in empirical research.

3. The quantitative identification and description of the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment and their resource allocation.

4. The development of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. The model will differentiate dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer-term strategy of altering the general resource base of these small firms. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments, will be optimised.

5.2.2 THE RESEARCH OBJECTIVES

The research purpose of this study will be achieved through the attainment of the following research objectives:

1. To quantitatively identify and describe the strategic processes of small businesses operating in a turbulent environment.
2. To establish and quantify the level of importance of strategic processes in these small businesses.
3. To establish and quantify the extent of implementation of strategic processes in these small businesses.
4. To determine from the identified strategic processes, which processes have statistically significant gaps between their level of importance and extent of implementation and which have no significant gaps.

5. To quantitatively identify and describe how small businesses operating in turbulent environments allocate their scarce resources to strategic processes.
6. To differentiate between those strategic processes that can be influenced by short term intervention mechanisms and those that require long term intervention mechanisms.
7. To use the differentiated processes to form the basis of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments will be optimised.

5.2.3 THE RESEARCH PROPOSITIONS

Proposition 1:
If there is a positive correlation between the level of importance and extent of implementation of strategic processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Proposition 2:
If there is a positive correlation between the level of importance and extent of implementation of reconfiguration enabling processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Proposition 3:
If there is a positive correlation between the level of importance and extent of implementation of reconfiguration processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

5.3 DISCUSSION: IMPORTANCE AND IMPLEMENTATION

The data analysis in section 4.4 provides the information required for the achievement of research objectives 1, 2 and 3. This analysis enables the quantitative identification and description of the strategic processes of small businesses operating in a turbulent environment, the establishment and quantification of the level of importance of strategic processes in these small businesses and the establishment and quantification of the extent of implementation of strategic processes in these small businesses.

For the strategic process clusters, it was found that these small businesses considered **measurement** to be the **most important** strategic process cluster; while **staff-reward** was found to be the **least important** strategic process cluster. On the other hand **networks and support systems** was found to be the **most implemented** strategic process cluster with **leadership-turbulence** being the **least implemented** process cluster.

For the individual processes, in terms of importance, it was found that processes 12, 18, 21 and 22 were the most important processes, while processes 10 and 32 were the least important processes

TABLE 25: THE MOST IMPORTANT STRATEGIC PROCESSES IN SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

Process 12
The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.
Process 18
The leadership of small businesses ensures that personalized service is offered to customers
Process 21
Key performance measures embedded in the action plans and are used to systematically track progress towards meeting organizational strategies.
Process 22
The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.

TABLE 26: THE LEAST IMPORTANT STRATEGIC PROCESSES IN SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

Process 10
Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.
Process 32
The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes

For the individual processes, in terms of implementation, it was found that processes 4, 5 and 6 were the most implemented processes, while process 14 was the least implemented process.

TABLE 27: THE MOST IMPLEMENTED STRATEGIC PROCESSES IN SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

Process 4
Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.
Process 5
The skills, knowledge, values and attitudes of the staff and leadership are important, relevant, valuable and available to customers.
Process 6
A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.

TABLE 28: THE LEAST IMPLEMENTED STRATEGIC PROCESS IN SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

Process 14   *The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available*.

This quantitative identification and description of the strategic processes of small businesses operating in a turbulent environment illustrates clearly which strategic process clusters and strategic processes are considered important and those that are not; as well as those that are extensively implemented and those that are not in small businesses operating in a turbulent environment.

This information provides a general review of the strategic processes of small businesses operating in a turbulent environment. This type of information is important, especially as the literature review in Chapter 2, has revealed the paucity of information in this area. Thus this quantitative identification and description of the strategic processes of small businesses operating in a turbulent environment provides a good starting point from which to commence filling this gap in the literature on small businesses, strategic processes and turbulent environments as well as a good starting point for a more in-depth investigation.

However, in order to obtain a better understanding of the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment and their resource allocation and in order to determine strategies to strengthen the dynamic capabilities in these small firms, the following section will extend the analysis to the importance – implementation gap.

5.4 DISCUSSION: IMPORTANCE /IMPLEMENTATION GAP

5.4.1 ALL PROCESSES

The data analysis in section 4.5.1 provides the information required for the achievement of research objectives 4. This analysis enables the determination from the identified strategic processes, whether there is a statistically significant gap between the level of importance and extent of implementation of all processes, in general.

The results indicate that in general, there is a significant difference between the importance and the implementation of strategic process clusters and strategic processes in small businesses operating in a turbulent environment. Thus, in general, the extent of the implementation of strategic processes in small businesses operating in a turbulent environment is not linked to their level of importance, and by extension, management capability, in these small businesses. Their resource reconfigurations are a function of their general resource availability and they are influenced by resource factors as a whole.

Since small businesses are generally resource impoverished, this prevents small businesses operating in a turbulent environment from initiating and sustaining dynamic capabilities, hence dynamic capabilities in these small firms are weakened and these small firms to not perform at an optimal level in a turbulent environment.

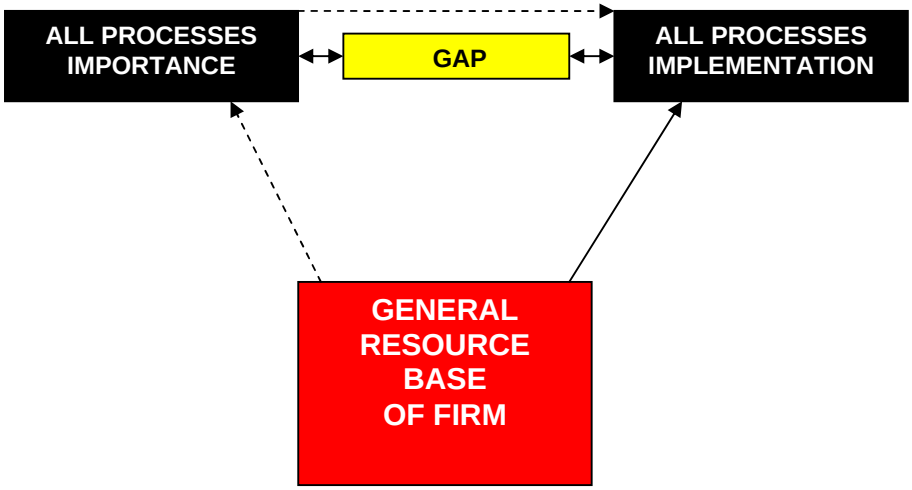


FIGURE 18: IMPORTANCE AND IMPLEMENTATION IN GENERAL

This general finding provides important information and adds to the knowledge base on small business theory. However, it is important to investigate further in order to determine whether there are any specific process clusters or processes that show no significant differences between the level of importance and extent of implementation. From the logic described in Section 1.4, changing the level of importance and by extension the management capability in these process clusters and processes will increase their extent of implementation, and by extension thereof, their resource allocation to these process clusters and processes. This will strengthen the dynamic capabilities in these small firms and optimise small business performance in a turbulent environment.

Therefore, the following sections will examine whether there are any significant differences or not between the level of importance and extent of implementation of process clusters and individual processes.

5.4.2 PROCESS CLUSTERS

The data analysis in section 4.5.2 provides the information required for the achievement of research objectives 4, 5 and 6. This analysis enables the determination from the identified strategic processes clusters of which process clusters have statistically significant gaps between their level of importance and extent of implementation and which have no significant gaps; the quantitative identification and description how small businesses operating in turbulent environments allocate their scarce resources to strategic process clusters and the differentiation between those strategic process clusters that can be influenced by short term intervention mechanisms and those that require long term intervention mechanisms.

5.4.2.1 A SIGNIFICANT DIFFERENCE BETWEEN THE IMPORTANCE AND IMPLEMENTATION OF PROCESS CLUSTERS

The results indicate that in small businesses operating in a turbulent environment, there is a significant difference between the level of importance and extent of implementation of the strategic process clusters staff knowledge, empowerment and motivation, leadership-general, leadership–turbulence, measurement, customers and networks. Thus, for these process clusters specifically, the extent of the implementation of strategic processes in small businesses operating in a turbulent environment is not linked to their level of importance, and by extension, management capability, in these small businesses. Their resource allocation, and by extension their extent of implementation, with respect to these identified process clusters are a function of their general resource availability and they are influenced by resource factors as a whole.

Since small businesses are generally resource impoverished, this prevents small businesses operating in a turbulent environment from initiating and sustaining dynamic capabilities that revolve around these process clusters, hence dynamic capabilities in these small firms are weakened and these small firms to not perform at an optimal level in a turbulent environment.

While the implementation of these process clusters suffers from a lack of resources, the results indicate that when small businesses operating in a turbulent environment do implement strategic processes, they allocate most of their scarce resources to the strategic process clusters of networks and support systems and to staff knowledge, empowerment and motivation. Since the former is perceived to be of lower importance than the latter [networks and support systems falls in the low importance quadrant compared to staff knowledge, empowerment and motivation, which is in the high importance quadrant in Graph 5], this finding also reinforces the view that for these process clusters their extent of implementation and by extension, their resource allocation is not linked to their level of importance.

From the above it can be seen that in small businesses operating in a turbulent environment, innovative resource reconfigurations revolve around networks and support systems and staff knowledge, empowerment and motivation and these small firms allocate most of their scarce resources to these process clusters.

The allocation of its scarce resources these two process clusters occurs at the expense of the process clusters, leadership-general, leadership-turbulence,

measurement and customers. This results in limited or no innovative resource reconfigurations revolving around these process clusters.

In Graph 5, in the quadrant high importance/low implementation, the process clusters – customers, measurement, leadership-general and leadership-turbulence – compete for whatever scarce resources that are left after these small businesses have implemented the staff-knowledge, empowerment and motivation and networks and support systems process clusters. Although these small businesses consider these process clusters to be important, their extent of implementation is low and scarce resources are spread out over these process clusters. In particular, these businesses face difficult choices about whether to allocate their resources to leadership-general or leadership turbulence [these process clusters are concentrated together in Graph 5].

These research findings provide clarity about how small businesses operating in a turbulent environment allocate their scarce resources to strategic processes.

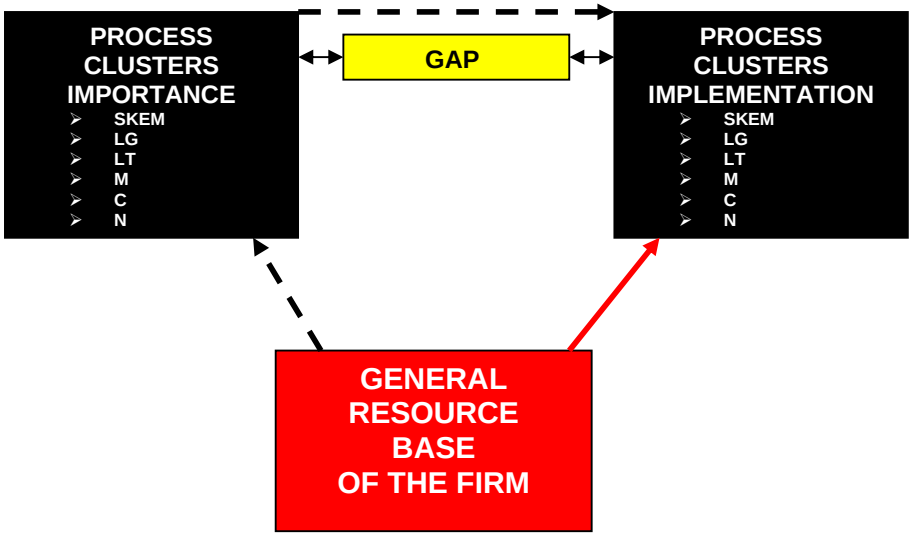


FIGURE 19: THE IMPORTANCE AND IMPLEMENTATION OF PROCESS CLUSTERS AND RESOURCES

5.4.2.2 NO SIGNIFICANT DIFFERENCE BETWEEN THE IMPORTANCE AND IMPLEMENTATION OF PROCESS CLUSTERS

The results presented in Section 4.5.2, also indicate that in small businesses operating in a turbulent environment, there is no significant difference between the level of importance and extent of implementation of the process cluster staff reward. Thus, for these process clusters specifically, the extent of the implementation of strategic processes in small businesses operating in a turbulent environment is linked to their level of importance, and by extension, management capability, in these small businesses. Their resource allocation, and by extension their extent of implementation, with respect to these identified process clusters are a function of their level of importance, and by extension management capability in small businesses operating in a turbulent environment.

This process cluster – Staff reward - can benefit from the shorter term intervention strategy of the enhancing and upgrading of management capabilities. Thus management education and training about staff reward and reward systems will benefit resource allocation to this process cluster and facilitate innovative resource reconfigurations that revolve around this process cluster. This will lead to a strengthening of the dynamic capabilities of these small firms and hence the performance of these small firms in turbulent environments will be optimised.

Other studies also reinforce this finding. In smaller firms compensation in terms of salary and benefits do not usually compare with those in larger firms (Lichtenstein, 1998:55). In addition, small business managers do not see incentives as essential to the improvement of productivity (Amba-Rao and Pendse, 1985:19). In addition Beaver and Jennings (2005:9), have also stated that in small firms, promotions are often made on the basis of birth or personal friendship, rather than on the basis of educational and technical qualifications.

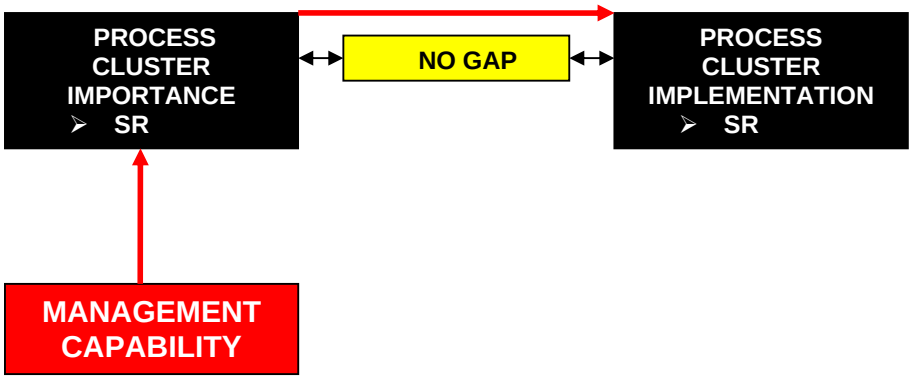


FIGURE 20: THE IMPORTANCE AND IMPLEMENTATION OF PROCESS CLUSTERS AND MANAGEMENT CAPABILITY

The above finding provides important information and adds to the knowledge base on small business theory, and further provides the basis for a rational, targeted, specific, comparably short term and less complex intervention strategy to enable the strengthening of the dynamic capabilities of small businesses operating in a turbulent environment.

However, it is also imperative to investigate further in order to determine whether there are any specific processes that show no significant differences between importance and implementation and which can then benefit from rational, targeted, specific, comparatively less complex and shorter term intervention strategies in order to enable the strengthening of the dynamic capabilities of small businesses operating in a turbulent environment.

Therefore, the following sections will examine whether there are any significant differences or not between the level of importance and extent of implementation of individual processes.

5.4.3 INDIVIDUAL PROCESSES

The data analysis in section 4.5.3 provides the information required for the achievement of research objectives 4, 5 and 6. This analysis enables the determination from the identified strategic processes clusters of which process clusters have statistically significant gaps between their level of importance and extent of implementation and which have no significant gaps; the quantitative identification and description how small businesses operating in turbulent environments allocate their scarce resources to strategic process clusters and the differentiation between those strategic process clusters that can be influenced by short term intervention mechanisms and those that require long term intervention mechanisms

5.4.3.1 A SIGNIFICANT DIFFERENCE BETWEEN THE IMPORTANCE AND IMPLEMENTATION OF PROCESSES

The results indicate that in small businesses operating in a turbulent environment, there is a significant difference between the level of importance and extent of implementation of the processes illustrated in Table 29. Thus, for these processes specifically, the extent of the implementation of strategic processes in small businesses operating in a turbulent environment is not linked to their level of importance, and by extension, management capability, in these small businesses. Their resource allocation, and by extension their extent of implementation, with respect to these identified processes are a function of their general resource availability and they are influenced by resource factors as a whole.

Since small businesses are generally resource impoverished, this prevents small businesses operating in a turbulent environment from initiating and sustaining dynamic capabilities that revolve around these process clusters, hence dynamic capabilities in these small firms are weakened and these small firms to not perform at an optimal level in a turbulent environment.

TABLE 29: STRATEGIC PROCESSES WHICH HAVE A SIGNIFICANT GAP BETWEEN LEVEL OF IMPORTANCE AND EXTENT OF IMPLEMENTATION

Process 1

The leadership of a small business, through both formal [e.g. defined and structured] and informal [e.g. observation] methods, fosters staff empowerment and innovation.

Process 2

The leadership of a small business allows the business to co-evolve by fostering, driving and executing multi-business/multi-unit collaborative linkages and managing group dynamics while at the same time empowering staff.

Process 3

Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower staff and further entrench the organizational culture.

Process 5

The skills, knowledge, values and attitudes of the staff and leadership are important, relevant, valuable and available to customers.

Process 9

Key human resource plans are derived from and linked to the overall business strategy with respect to compensation, benefits and recruitment.

Process 11

The leadership of a small business serves as a role model for the organisation and all stakeholders.

Process 12

The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.

Process 13

The leadership of a small business ensures that the design of key healthcare services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.

Process 14

The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available.

Process 15

The leadership of a small business develops strategies that are clearly translated into action plans that support the achievement of organizational objectives. Strategies are linked to resources, implementation procedures and defined performance measures.

Process 16

The leadership of a small business knows what resources [e.g. human, financial, physical, support] are available to the business; their constraints, their capacities and their advantages.

Process 17

The leadership of a small business devises appropriate strategies that can maximize any resource advantage and overcome any resource limitation.

Process 18

The leadership of small businesses ensures that personalized service is offered to customers

Process 19

The organization regularly measures and analyses organizational performance to provide the information and data to support the organization's strategic planning process, as well as its operational and functional processes to enable continuous improvement.

Process 20

Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.

Process 21

Key performance measures are embedded in the action plans and are used to systematically track progress towards meeting organisational strategies.

Process 22

The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.

Process 23

All measures of organizational performance captured by the small business are compared against industry or best-in-class benchmarks

Process 24

There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.

Process 25

A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analyzed as a source of improvement activities.

Process 26

Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.

Process 27

The design of key healthcare services and the service delivery process is addressed systematically accounting for changing customer requirements.

Process 28

The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business and positive referral.

Process 31

The leadership of a small business has strong friend, family and professional networks.

Process 32

The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes

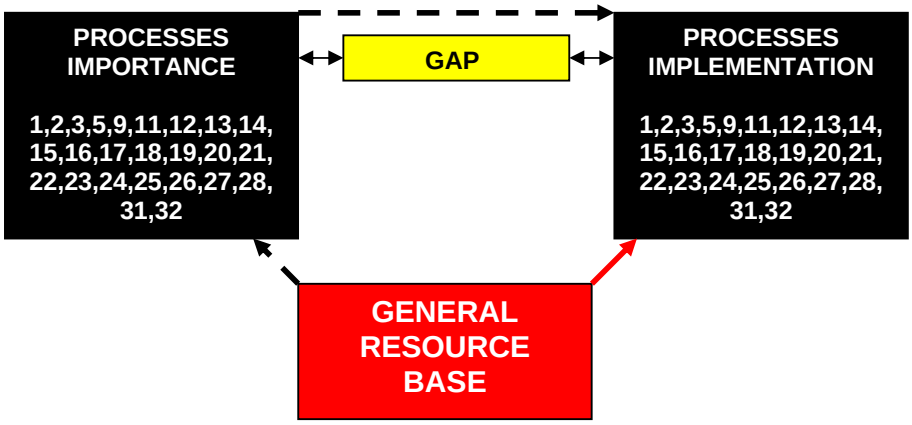


FIGURE 21: THE IMPORTANCE AND IMPLEMENTATION OF PROCESSES AND RESOURCES

While the implementation of these process clusters suffers from a lack of resources, the results indicate that when small businesses operating in a turbulent environment do implement strategic processes, they allocate most of their scarce resources to the strategic processes 5, 31 and 32, illustrated in Table 32, although the latter two are perceived to be of lower importance than the former [in Graph 6, processes 31 and 32 fall in the low importance quadrant, compared to process 5, which is in the high importance quadrant]. This finding also reinforces the view that for these process clusters their extent of implementation and hence resource allocation and new resource reconfiguration is not linked to their level of importance.

From the above it can be seen that in small businesses operating in a turbulent environment, innovative resource reconfigurations revolve around strategic processes – 5, 31 and 32 - and these small firms allocate most of their scarce resources to these processes.

The allocation of its scarce resources these three processes clusters occurs at the expense of the other processes stated in Table 31. This results in limited or no innovative resource reconfigurations revolving around these processes.

TABLE 30: STRATEGIC PROCESSES THAT RECEIVE THE GREATEST RESOURCE ALLOCATION

Process 5
The skills, knowledge, values and attitudes of the staff and leadership are important, relevant, valuable and available to customers.
Process 31
The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business, and positive referral.
Process 32
The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes

In Graph 6, in the quadrants, high importance/low implementation, and low importance and low implementation, the processes – 1,2,3,9,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28 - compete for whatever scarce resources that are left after these small businesses have implemented the processes – 5, 31, 32. Although these small businesses consider these processes to be important, their extent of implementation is low and scarce resources are spread out over these process clusters. In particular, these businesses face difficult choices about whether to allocate their resources to the following groups of processes:

- Group 1-1/2/3/16/24/26/27/28
- Group 2-12/15/17/18/20/22
- Group 3-11/13/14/19/23

These processes are concentrated together in three distinct areas in Graph 6.

Because their resource allocation, and by extension their extent of implementation, with respect to these identified processes, 1,2,3,16,24,26,27,28, illustrated in Table 31, are a function of their general resource availability and they are influenced by resource factors as a whole, small businesses operating in a turbulent environment may pursue one of these processes at the expense of another. For example, good relationships with customers may be implemented at the expense of the reconfiguration process of co-evolving or work and job descriptions created at the expense of ease of customer access to assistance. Attempting to change only the importance perception of the management towards these processes will not change the manner in which resources are allocated to

these processes and subsequently innovative resource reconfigurations will not be enabled. These processes require the comparatively more complex and longer term intervention of an alteration of the general resource base of the small business operating in a turbulent environment in order to facilitate innovative resource reconfigurations that revolve around these processes.

TABLE 31: GROUP 1-STRATEGIC PROCESSES ABOUT WHICH SMALL BUSINESS OPERATING IN A TURBULENT ENVIRONMENT FACE DIFFICULT CHOICES IN RESOURCE ALLOCATION

Process 1
The leadership of a small business, through both formal [e.g. defined and structured] and informal [e.g. observation] methods, fosters staff empowerment and innovation.
Process 2
The leadership of a small business allows the business to co-evolve by fostering, driving and executing multi-business/multi-unit collaborative linkages and managing group dynamics while at the same time empowering staff.
Process 3
Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower staff and further entrench the organizational culture.
Process 16
The leadership of a small business knows what resources [e.g. human, financial, physical, support] are available to the business; their constraints, their capacities and their advantages.
Process 24
There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.
Process 26
Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.
Process 27
The design of key healthcare services and the service delivery process is addressed systematically accounting for changing customer requirements.
Process 28
The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business and positive referral.

Because their resource allocation, and by extension their extent of implementation, with respect to these identified processes, 12, 15, 17,18,20,22,, illustrated in Table 32, are a function of their general resource availability and they are influenced by resource factors as a whole, small businesses operating in a turbulent environment may pursue one of these processes at the expense of another. For example, personalised customer service may be implemented at the expense of the reconfiguration enabling process of simple rules or the type and quality of data that is collected may be at the expense of ease of using key data to improve performance. Attempting to change only the importance perception of the management towards these processes will not change the manner in which resources are allocated to these processes and subsequently innovative resource reconfigurations will not be enabled. These processes require the comparatively more complex and longer term intervention of an alteration of the general resource base of the small business operating in a turbulent environment in order to facilitate innovative resource reconfigurations.

TABLE 32: GROUP 2-STRATEGIC PROCESSES ABOUT WHICH SMALL BUSINESS OPERATING IN A TURBULENT ENVIRONMENT FACE DIFFICULT CHOICES IN RESOURCE ALLOCATION

Process 12
The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.
Process 15
The leadership of a small business develops strategies that are clearly translated into action plans that support the achievement of organizational objectives. Strategies are linked to resources, implementation procedures and defined performance measures.
Process 17
The leadership of a small business devises appropriate strategies that can maximize any resource advantage and overcome any resource limitation.
Process 18
The leadership of small businesses ensures that personalized service is offered to customers
Process 20

Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.
Process 22
The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.

Because their resource allocation, and by extension their extent of implementation, with respect to these identified processes, 11,13,14,9,3, illustrated in Table 33, are a function of their general resource availability and they are influenced by resource factors as a whole, small businesses operating in a turbulent environment may pursue one of these processes at the expense of another. For example, measurement and analysis of organisational performance may be implemented at the expense of the reconfiguration process of patching or the role model function of the leadership of the small business may be implemented at the expense of best-in class benchmarks. Attempting to change only the importance perception of the management towards these processes will not change the manner in which resources are allocated to these processes and subsequently innovative resource reconfigurations. These processes require the comparatively more complex and longer term intervention of an alteration of the general resource base of the small business operating in a turbulent environment in order to facilitate innovative resource reconfigurations.

TABLE 33: GROUP 3-STRATEGIC PROCESSES ABOUT WHICH SMALL BUSINESS OPERATING IN A TURBULENT ENVIRONMENT FACE DIFFICULT CHOICES IN RESOURCE ALLOCATION

Process 11
The leadership of a small business serves as a role model for the organisation and all stakeholders.
Process 13
The leadership of a small business ensures that the design of key healthcare services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.

Process 14

The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available.

Process 19

The organization regularly measures and analyses organizational performance to provide the information and data to support the organization's strategic planning process, as well as its operational and functional processes to enable continuous improvement.

Process 23

All measures of organizational performance captured by the small business are compared against industry or best-in-class benchmarks

The results also indicate that processes 9 and 25, illustrated in table 34, are of low importance in small businesses operating in a turbulent environment. They are also implemented to a low extent. These processes do not receive priority in resource allocation. Attempting to change only the importance perception of the management towards these processes will not change the manner in which resources are allocated to these processes and subsequently innovative resource reconfigurations will not be enabled. These processes require the comparatively more complex and longer term intervention of an alteration of the general resource base of the small business operating in a turbulent environment in order to facilitate innovative resource reconfigurations.

TABLE 34: STRATEGIC PROCESSES THAT DO NOT RECEIVE PRIORITY IN RESOURCE ALLOCATION IN SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT.

Process 9
Key human resource plans are derived from and linked to the overall business strategy with respect to compensation, benefits and recruitment.
Process 25
A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analyzed as a source of improvement activities.

5.4.3.2 NO SIGNIFICANT DIFFERENCE BETWEEN THE IMPORTANCE AND IMPLEMENTATION OF PROCESSES

The results also indicate that in small businesses operating in a turbulent environment, there is no significant difference between the level of importance and extent of implementation of the processes 4, 6,7,8,10,29 and 30, illustrated in Table 35. Thus, for these processes specifically, the extent of the implementation of strategic processes in small businesses operating in a turbulent environment is linked to their level of importance, and by extension, management capability, in these small businesses. Their resource allocation, and by extension their extent of implementation, with respect to these identified processes are a function of their level of importance, and by extension management capability in small businesses operating in a turbulent environment.

These processes – 4, 6,7,8,10,29 and 30 - can benefit from the shorter term intervention strategy of the enhancing and upgrading of management capabilities. Thus management education and training about these processes will benefit resource allocation to this process cluster and facilitate innovative resource reconfigurations that revolve around this process cluster. This will lead to a strengthening of the dynamic capabilities of these small firms and hence the performance of these small firms in turbulent environments will be optimised.

TABLE 35: STRATEGIC PROCESSES WHICH HAVE NO SIGNIFICANT GAP BETWEEN LEVEL OF IMPORTANCE AND EXTENT OF IMPLEMENTATION

Process 4

Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.

Process 6

A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.

Process 7

Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information

Process 8

The leadership of a small business leads with an impelling strategic focus while allowing and rewarding organizational members for being active players in the strategic process. While staff are encouraged and rewarded for experimenting, taking risks and being creative, the small business leadership at the same time retains control of the overall goals of the firm.

Process 10

Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.

Process 29

The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities,

Process 30

The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.

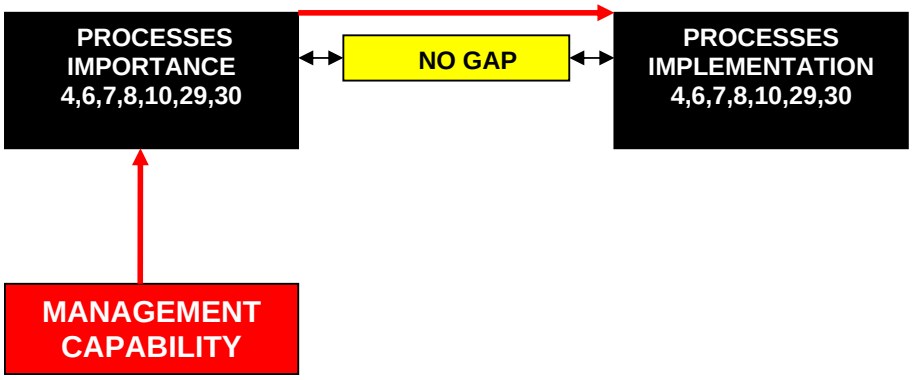


FIGURE 22: THE IMPORTANCE AND IMPLEMENTATION OF PROCESSES AND MANAGEMENT CAPABILITY

The above findings provide important information and add to the knowledge base and further provide the basis for rational, targeted, specific, comparably short term and less complex intervention strategies to enable the strengthening of dynamic capabilities in small businesses operating in a turbulent environment.

5.5 CHAPTER CONCLUSIONS

The results that were presented in Chapter 4 were discussed here. The discussion started with a description of the level of importance and extent of implementation of processes clusters and processes. It then proceeded to discuss the results on the level of process clusters, and then at the level of individual processes. This discussion will feed into the next chapter on conclusions with a view to satisfying the research problem, the research purpose, the research objectives and the research propositions. The discussion will also be drawn into the new strategic model and theory that will be developed.

CHAPTER SIX

CONCLUSIONS

AND

RECOMMENDATIONS

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 CHAPTER SUMMARY

The aims of this chapter were to present the major findings of this study, show how the research problem, the research purpose, the research objectives and the research propositions are satisfied and to make recommendations for future areas of research.

This chapter commenced with a linking of each element of the research purpose, research objectives to chapters and sections where they were addressed. Using the empirical results of the study, the research propositions were examined to indicate whether they were supported or not. This chapter also reported on a new strategic model and theory on the strategic processes of small businesses operating in a turbulent environment and presented a summary of the main research findings.

The main conclusion of the study was highlighted viz. by the employment of stepwise, rational, specific and targeted interventions and strategies that are designed to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment, the dynamic capabilities of these small firms can be strengthened and hence their performance in turbulent environments optimised.

Several recommendations for future research in this area were also made.

6.2 INTRODUCTION

The research problem and the research purpose are satisfied through the achievement of the research objectives and the investigation of the research propositions.

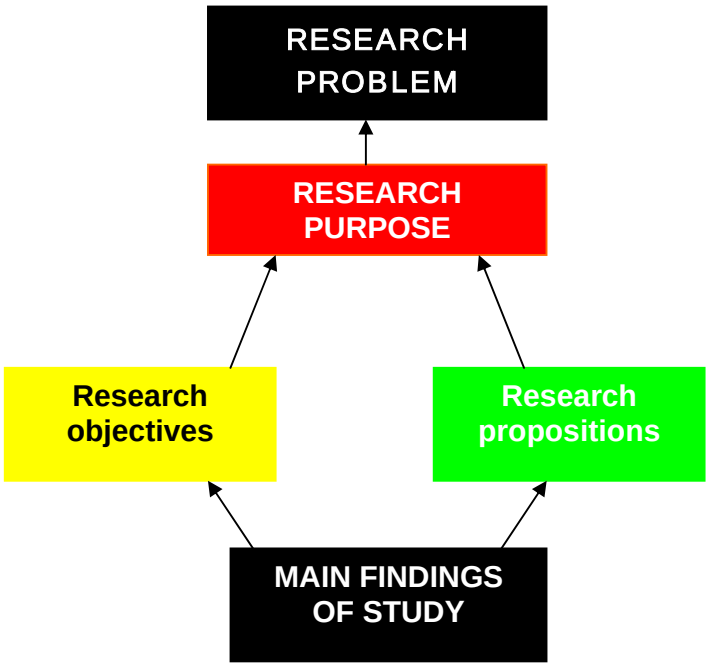


FIGURE 23: STUDY FINDINGS, RESEARCH OBJECTIVES, RESEARCH PROPOSITIONS, RESEARCH PURPOSE AND RESEARCH PROBLEM

6.3 ACHIEVEMENT OF RESEARCH PURPOSE:

In order to achieve the anticipated solution to the research problem of this study, the purpose of the research was to investigate the strategic processes of small businesses operating in a turbulent environment. The core elements of this purpose comprise of:

1. The conceptual identification and the separation of dynamic capabilities into those processes that are reconfiguration processes and those processes that are reconfiguration enabling processes.
   This has been achieved in Chapter 2.

2. The conceptualisation of strategic processes or dynamic capabilities with a specific set of measurable “best practice” processes that capture and incorporate the idea of strategic processes or dynamic capabilities while being grounded in empirical research.
   This has been achieved in Chapter 2.

3. The quantitative identification and description of the strategic processes or dynamic capabilities of small businesses operating in a turbulent environment and their resource allocation.
   This has been achieved in Chapters 4 and 5.

4. The development of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. The model will differentiate dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer- term strategy of altering the general resource base of these small firms. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments, will be optimised.
   This has been achieved in Chapter 5 and reported in Chapter 6.

6.4 ACHIEVEMENT OF RESEARCH OBJECTIVES:

In order to achieve the research purpose of this study the research objectives of this study are:

1. To quantitatively identify and describe the strategic processes of small businesses operating in a turbulent environment.
   This has been achieved in Sections 4.4 and 5.1

2. To establish and quantify the level of importance of strategic processes in these small businesses.
   This has been achieved in Sections 4.4 and 5.1

3. To establish and quantify the extent of implementation of strategic processes in these small businesses.
This has been achieved in Sections 4.4 and 5.1

4. To determine from the identified strategic processes, which processes have statistically significant gaps between their level of importance and extent of implementation and which have no significant gaps.
This has been achieved in Sections 4.5 and 5.2

5. To quantitatively identify and describe how small businesses operating in turbulent environments allocate their scarce resources to strategic processes.
This has been achieved in Sections 4.5 and 5.2

6. To differentiate between those strategic processes that can be influenced by short term intervention mechanisms and those that require long term intervention mechanisms.
This has been achieved in Section 4.5 and reported in Chapter 6

7. To use the differentiated processes to form the basis of a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments will be optimised.
This has been achieved in Section 4.5 and reported in Chapter 6

6.5 ADDRESSING RESEARCH PROPOSITIONS

The research propositions developed according to the methodology reported in Chapter 3 and motivated for in Chapter 2 are evaluated in this section against the research findings.

Proposition 1:
If there is a positive correlation between the level of importance and extent of implementation of strategic processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

The study's findings are reflected initially as process clusters and then individually as processes. The process clusters that were identified through a factor analysis are:

- Staff – knowledge, motivation and empowerment
- Staff-reward
- Leadership-general
- Leadership-turbulence
- Measurement
- Customers
- Networks and Support Systems

Of these, only the process cluster Staff-reward displayed no significant gap between the level of importance and the extent of implementation in small businesses operating in a turbulent environment. Section 1.4 describes the importance/implementation approach used in this study.

Where there is no significant difference between the level of importance and extent of implementation of these process clusters, the extent of implementation and hence their resource allocation, will be influenced by an alteration of the importance perception. Thus, for the process cluster Staff-reward, increasing the levels of importance, and by extension management capability about Staff-reward, will increase the extent of its implementation, and by extension, extent of resource allocation to this process cluster in small businesses operating in a turbulent environment. This will strengthen the dynamic capabilities of these small firms and enable the optimal performance of small businesses operating in a turbulent environment.

The research results **partially support this proposition**, since only the extent of implementation, and by extension resource allocation to the process cluster Staff-reward will be increased by an increase in its level of importance, and by extension, management capability in this process cluster.

Resource impoverishment of the general resource base of the small business operating in a turbulent environment constrains the implementation of the other process clusters, Staff – knowledge, motivation and empowerment, Leadership-general, Leadership-turbulence, Measurement, Customers, Networks and Support Systems.

Proposition 2:
If there is a positive correlation between the level of importance and extent of implementation of reconfiguration enabling processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Of the reconfiguration enabling processes, only processes 4-6-7-8-10-29-30 showed no significant gap between the level of importance and extent of implementation in small businesses operating in a turbulent environment. These processes are indicated below:

Process 4
Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.
Process 6
A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.
Process 7
Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information
Process 8
The leadership of a small business leads with an impelling strategic focus while allowing and rewarding organizational members for being active players in the strategic process. While staff are encouraged and rewarded for experimenting,

taking risks and being creative, the small business leadership at the same time retains control of the overall goals of the firm.

Process 10

Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.

Process 29

The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities,

Process 30

The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.

Where there is no significant difference between the level of importance and extent of implementation of these processes, the extent of implementation and hence their resource allocation, will be influenced by an alteration of the importance perception. Thus, for the process - 4-6-7-8-10-29-30- increasing the levels of importance, and by extension management capability about these processes, will increase the extent of their implementation, and by extension, extent of resource allocation to them in small businesses operating in a turbulent environment. This will strengthen the dynamic capabilities of these small firms and enable the optimal performance of small businesses operating in a turbulent environment.

The research results **partially support this proposition**, since only the extent of implementation, and by extension resource allocation to the processes - 4-6-7-8-10-29-30- will be increased by an increase in its level of importance, and by extension, management capability in these processes.

Resource impoverishment of the general resource base of the small business operating in a turbulent environment constrains the implementation of the other processes indicated below:

Process 1

The leadership of a small business, through both formal [e.g. defined and structured] and informal [e.g. observation] methods, fosters staff empowerment and innovation.

Process 3

Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower staff and further entrench the organizational culture.

Process 5

The skills, knowledge, values and attitudes of the staff and leadership are important, relevant, valuable and available to customers.

Process 9

Key human resource plans are derived from and linked to the overall business strategy with respect to compensation, benefits and recruitment.

Process 11

The leadership of a small business serves as a role model for the organisation and all stakeholders.

Process 12

The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.

Process 13

The leadership of a small business ensures that the design of key healthcare services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.

Process 15

The leadership of a small business develops strategies that are clearly translated into action plans that support the achievement of organizational objectives. Strategies are linked to resources, implementation procedures and defined performance measures.

Process 16

The leadership of a small business knows what resources [e.g. human, financial, physical, support] are available to the business; their constraints, their capacities and their advantages.

Process 17

The leadership of a small business devises appropriate strategies that can maximize any resource advantage and overcome any resource limitation.

Process 18

The leadership of small businesses ensures that personalized service is offered to customers

Process 19

The organization regularly measures and analyses organizational performance to provide the information and data to support the organization's strategic planning process, as well as its operational and functional processes to enable continuous improvement.

Process 20

Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.

Process 21

Key performance measures are embedded in the action plans and are used to systematically track progress towards meeting organisational strategies.

Process 22

The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.

Process 23

All measures of organizational performance captured by the small business are compared against industry or best-in-class benchmarks

Process 24

There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.

Process 25

A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analyzed as a source of improvement activities.

Process 26

Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.

Process 27

The design of key healthcare services and the service delivery process is addressed systematically accounting for changing customer requirements.

Process 28

The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business and positive referral.

Process 31

The leadership of a small business has strong friend, family and professional networks.

Process 32

The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes

Proposition 3:

If there is a positive correlation between the level of importance and extent of implementation of reconfiguration processes in small businesses operating in a turbulent environment, then the extent of implementation of these processes will increase with an increase in the level of importance of these processes in these small firms.

Of the reconfiguration processes, none of the processes showed a lack of any significant gap between the level of importance and extent of implementation in small businesses operating in a turbulent environment.

Thus, the research results **do not support this proposition**, since the extent of implementation of none of these processes will be increased by an increase in its level of importance.

Resource impoverishment of the general resource base of the small business operating in a turbulent environment constrains the implementation of the reconfiguration processes. These as indicated in the below:

Process 2

The leadership of a small business allows the business to co-evolve by fostering, driving and executing multi-business/multi-unit collaborative linkages and managing group dynamics while at the same time empowering staff.

Process 14

The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available.

Although the propositions of this research study are only partially supported by the empirical data, the results, which clearly differentiate between those processes whose extent of implementation can be increased by an increase in the level of importance, and by extension management capabilities; and those processes whose extent of implementation, and by extension their resource allocation, leads the way towards new strategies to initiate and sustain dynamic capabilities in small businesses operating in a turbulent environment. This provides the basis of a new strategic model and theory on strengthening the dynamic capabilities of small businesses that operate in a turbulent environment.

6.6 A NEW STRATEGIC MODEL: THE STRENGTHENING OF THE DYNAMIC CAPABILITIES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

The differentiation of dynamic capabilities into those processes whose extent of implementation can be increased by an increase in the level of importance, and by extension management capabilities; and those processes whose extent of implementation, and by extension their resource allocation, leads the way towards new strategies to initiate and sustain dynamic capabilities in small businesses operating in a turbulent environment. This provides the basis of a new strategic model and theory on strengthening the dynamic capabilities of small businesses that operate in a turbulent environment. Dynamic capabilities are a business asset of the highest order (Lopez, 2005:661) and also according to Wu (2005), for firms facing a changing environment, strengthening dynamic capabilities is a key concern.

This new strategic theory and model proposes two stages viz. an initiating stage and a sustaining stage. The initiating stage comprises the initiation of those processes whose level of implementation, and by extension, whose resources allocation is dependant of the level of importance, and by extension, the management capability in those processes. The sustaining stage comprises those processes whose level of implementation, and by extension, whose resources allocation is not dependant of the level of importance, and by extension, the management capability in those processes. Instead, it is dependant on the general resource base of the firm.

Thus, applying the logic of Section 1.3,1.4 and 2.6, to the results discussed in Chapter 5, the comparatively short term intervention mechanism of upgrading and enhancing management capability can change the importance perceptions of managers about the process cluster staff-reward and the processes, 4, 6,7,8,10,29 and 30, illustrated below. This is the initiating phase of the framework.

Process 4

Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.

Process 6

A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.

Process 7

Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information

Process 8

The leadership of a small business leads with an impelling strategic focus while allowing and rewarding organizational members for being active players in the strategic process. While staff are encouraged and rewarded for experimenting, taking risks and being creative, the small business leadership at the same time retains control of the overall goals of the firm.

Process 10

Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.

Process 29

The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities,

Process 30

The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.

From the content of these processes and the process cluster staff-reward, it can be seen that the focus is on the creation of a well educated, developed and trained staff component, who receive a variety of employee support services, are empowered, well compensated and rewarded by a leadership that has its fingers on the pulse of the firm, its environment and its stakeholders. Thus the initiating phase in the framework is the changing of the importance perception towards these specific processes and the process cluster staff-reward. This will enable the allocation of resources to achieve innovative resource reconfigurations that revolve around these processes, in the short term.

Changing the importance perception towards processes, 4,6,7,8,10,29 and 30 and the process cluster of staff-reward has a two-fold effect on the general resource base of the small firm: firstly, management capability is also a small business resource and therefore upgrading and enhancing management capability also contributes towards to the general upgrading and enhancement of the general resource base of the small firm; and secondly, the upgrading and

enhancement of the management capability has a multiplier effect on the organisation – the greater the management capability, the greater the amount of resources a firm can aggregate. According to Kozan, Oksoy and Ozsoy (2006:114), small business resource aggregation is positively influenced by an increase in management know-how.

The comparatively longer term and more complex intervention mechanism of enhancing and upgrading the general resource base of the firm involves, in addition to managerial resources, financial, technical and organisational resources. Thus this construct is driven by more that the importance perception of managers about what it takes to succeed in turbulent markets and what management and market competencies are required to respond to such changes. In addition, the small business also operates in a resource impoverished and resource constrained environment. However, this construct also has some effect on management capability, since managerial resources also form part of the general resource base of the firm, hence having some influence on the importance perception. Addressing the general resource base of the small firm operating in a turbulent environment is the sustaining stage of the framework. This will enable the allocation of resources to achieve innovative resource reconfigurations that revolve around these processes, in the long term.

By following the stepwise, rational, specific and targeted approach of first addressing the importance perception of the process cluster staff-reward and processes 4,6,7,8,10,29 and 30, the leadership of small businesses operating in a turbulent environment will foster the creation of a well educated, developed and trained staff component, who receive a variety of employee support services, are empowered, well compensated and rewarded by a leadership that has its fingers on the pulse of the firm, its environment and its stakeholders. This will serve as a platform to enable the resource aggregation that will trigger the promotion of innovative resource reconfigurations. Furthermore, since management capability is also a small business resource as stated earlier, management capability will also be further upgraded and enhanced.

Some studies have also identified similar constructs, for example, Swamy and Balaji (2006:41) have found that small firms that are ISO 9000 [a framework for quality assurance] certified, place a greater emphasis on human resource management practices, in order to remain competitive than non-ISO certified firms However, Mazzarol (2003: 27), highlighted the management deficiencies of small businesses by finding that owners and managers of small businesses need to develop skills and competencies in leadership, coaching and management.

Thus this study's development of a new strategic model and theory on the strategic processes of small businesses operating in a turbulent environment starts to fill the knowledge gap on strengthening dynamic capabilities in these small firms and hence enables these small firms to optimise their performance in a turbulent environment.

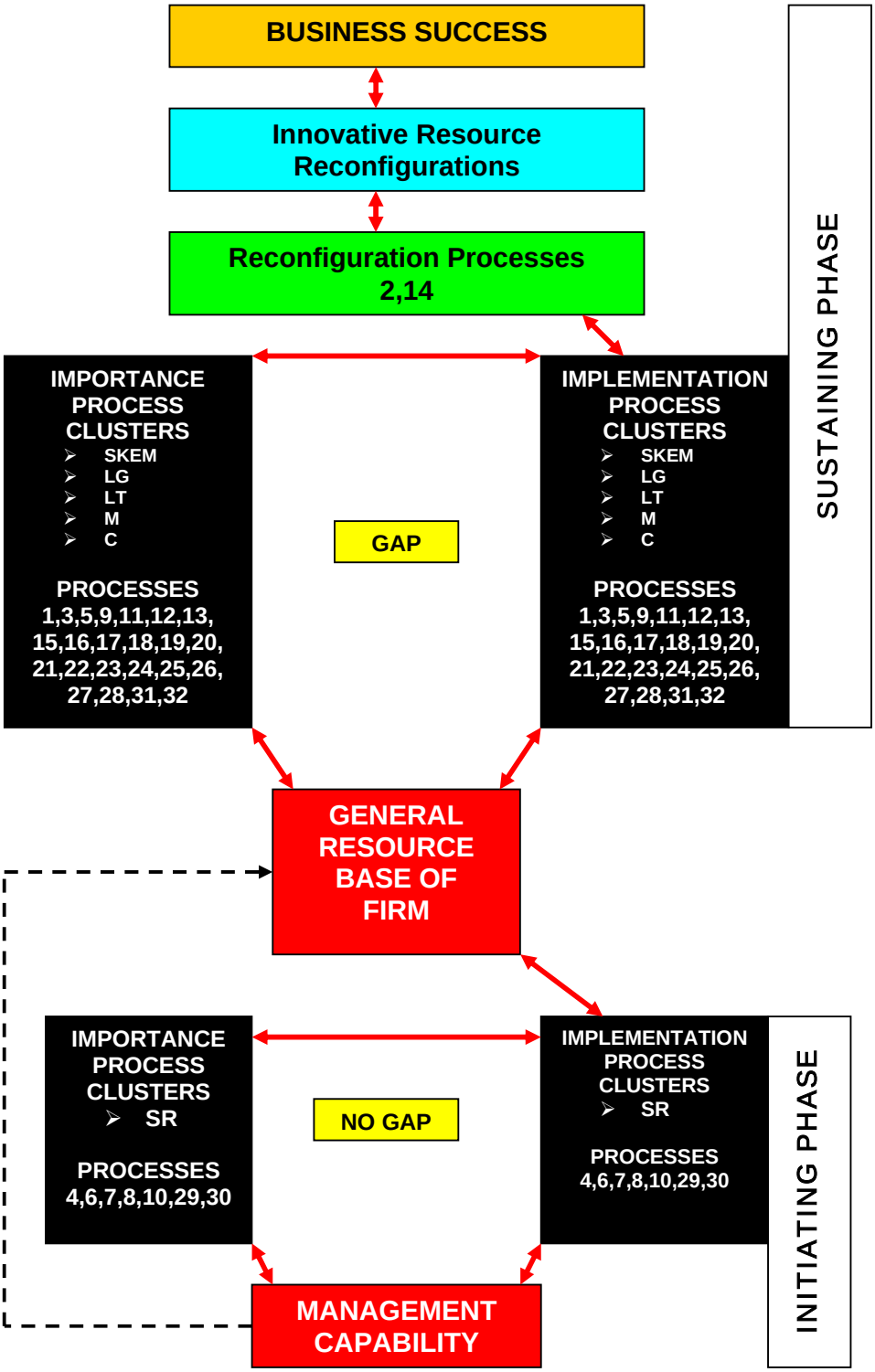


FIGURE 24: **A NEW STRATEGIC MODEL: THE STRENGTHENING OF THE DYNAMIC CAPABILITIES OF SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT**

6.7 A NEW STRATEGIC THEORY: THE STRENGTHENING OF DYNAMIC CAPABILITIES IN SMALL BUSINESSES OPERATING IN A TURBULENT ENVIRONMENT

Drawing on the new strategic model on strengthening the dynamic capabilities of small businesses operating in a turbulent environment, this section describes the new strategic theory for these small firms. The theory developed provides the solution to the research problem defined in Chapter 1 -"to determine how to strengthen the dynamic capabilities of small businesses operating in a turbulent environment"

***If small businesses operating in a turbulent environment increase the level of importance, and by extension, the management capability in the process cluster Staff-reward and the processes - 4-6-7-8-10-29-30 – then their extent of implementation, and by extension the extent of resource allocation to these specific process clusters and processes, in these small firms will increase*.**

According to Miller (1996:485), the "learning manager" acquires new knowledge and is able and willing to apply that knowledge in making decisions or influencing others in the organisation. Beaver and Jennings (2005: 11) describe the small business the owner as an individual who establishes and manages a business for the primary purpose of furthering personal goals and to whom the business is a primary source of income and which consumes the majority of his/her time and resources. Thus, such a profile would fit the willing part of Miller's definition. In order to meet the "able" part of the definition of a "learning manager" , management capabilities are then critical. Furthermore, a number of authors have argued that key components in the success/growth of small firms are the competencies, skills and knowledge of their managers (Hendry et al., 1991; Marshall et al., 1995) and there is evidence to suggest that levels of skills in small firm managers are often lacking (Sisson and Storey, 1988; Stanworth and Gray, 1991; Vickerstaff, 1992; Goss and Jones, 1992).

This will also lead to a sustaining of innovative resource reconfigurations through an increase in the resource base of the firm

This multiplier effect is due to management capability being part of the general resource base of the firm as well as the increase in resources that arise from greater management capability. Kozan, Oksoy and Ozsoy (2006:114) state that by

improving management know-how, the resource aggregation capability of the small firm is improved.

NEW STRATEGIC THEORY:

If small businesses operating in a turbulent environment increase the level of importance, and by extension, the management capability, in the process cluster Staff-reward and the processes - 4-6-7-8-10-29-30 – then their extent of implementation, and by extension the extent of resource allocation to these specific process clusters and processes, in these small firms will increase. This will also lead to a sustaining of innovative resource reconfigurations through an increase in the resource base of the firm.

Process 4

Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.

Process 6

A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.

Process 7

Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information

Process 8

The leadership of a small business leads with an impelling strategic focus while allowing and rewarding organizational members for being active players in the strategic process. While staff are encouraged and rewarded for experimenting, taking risks and being creative, the small business leadership at the same time retains control of the overall goals of the firm.

Process 10

Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.

Process 29

The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities.

Process 30

The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.

The overall effect of the initiation and sustaining of dynamic capabilities according to this new strategic theory will be the strengthening of dynamic capabilities, and hence the optimal performance of small businesses operating in a turbulent environment.

6.8 A SUMMARY OF THE MAIN FINDINGS OF THE STUDY

In small businesses that operate in a turbulent environment, it was found that:

- For the strategic process clusters, it was found that measurement was considered to be the most important strategic process cluster; while staff-reward was found to be the least important strategic process cluster. On the other hand networks and support systems was found to be the most implemented strategic process cluster with leadership-turbulence the least implemented process cluster.

- For the individual processes, in terms of importance, it was found that processes 12, 18, 21 and 22 were the most important processes, while processes 10 and 32 were the least important processes. For the individual processes, in terms of implementation, it was found that processes 4, 5 and 6 were the most implemented processes, while process 14 was the least implemented process.

- For all processes in general, there was no significant gap between the level of importance and the extent of implementation. This indicated that , in general, the resource impoverishment of small businesses operating in a turbulent environment inhibited their dynamic capabilities.

- At the process cluster level, there was a significant gap between the level of importance and extent of implementation, only for the process cluster – Staff reward. This indicated that an increased extent of implementation and by extension, an increased resource allocation, to this process cluster

was dependant on the level of importance and by extension, the management capability.

- At the process level, there was a significant gap between the level of importance and extent of implementation, only for the processes - 4-6-7-8-10-29-30. This indicated that an increased extent of implementation and by extension, an increased resource allocation, to these processes was dependant on the level of importance and by extension, the management capability.

These research findings have been incorporated in a new strategic model and theory aimed at strengthening the dynamic capabilities of small businesses operating in a turbulent environment and hence to optimise the performance of these small firms in a turbulent environment.

6.9 CONCLUSIONS

For businesses in a turbulent environment, strengthening their dynamic capabilities is a key concern (Wu, 2005). For small businesses operating in a turbulent environment, this is especially relevant, since the small business sector is a sector that is not performing optimally and furthermore, falls short of expectations. Arising from this business and management problem was this study's research problem – viz. "How to strengthen the dynamic capabilities of small businesses operating in a turbulent environment".

Therefore this study proposes a model that elucidates a rational, specific and targeted approach to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment. The model differentiates dynamic capabilities into those that can be influenced by the shorter-term intervention strategy of specifically increasing management capabilities and those that require the longer- term strategy of altering the general resource base of these small firms. By using this rational, specific and targeted approach to initiate and sustain the dynamic capabilities of these small firms, their dynamic capabilities will be strengthened and hence the performance of these small firms in turbulent environments will be optimised.

By following the stepwise, rational, specific and targeted approach of first addressing the importance perception, and by extension, the management

capability in the process cluster staff-reward and processes 4,6,7,8,10,29 and 30, the leadership of small businesses operating in a turbulent environment will foster the creation of a well educated, developed and trained staff component, who receive a variety of employee support services, are empowered, well compensated and rewarded by a leadership that has its fingers on the pulse of the firm, its environment and its stakeholders. This will serve as a platform to enable the resource aggregation that will trigger the sustaining of innovative resource reconfigurations. Furthermore, since management capability is also a small business resource as stated earlier, management capability will also be further upgraded and enhanced.

This study thus concludes that by the employment of stepwise, rational, specific and targeted interventions and strategies that are designed to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment, the dynamic capabilities of these small firms can be strengthened and hence their performance in turbulent environments optimised.

Dynamic capabilities are a business asset of the highest order and are key factors in optimising the strategic course of the company's future (Lopez, 2005:661).

6.10 STUDY RECOMMENDATIONS FOR FUTURE RESEARCH

In order to further extend and build upon the body of knowledge of management literature on strategy, dynamic capabilities and the strategic processes of small businesses operating in a turbulent environment; as well as to enhance managerial practice, the following recommendations are made:

- Following through from Dubin's eight step theory building methodology, (Dubin,1978), hypotheses should be developed and tested.

- The study should be repeated in other sectors of small businesses, both those in regulated as well as unregulated environments. This is important since the strategic processes of small businesses in unregulated industries may differ from those in regulated ones.

- The study should be repeated in small businesses segmented by the criterion of owner-led or manager-led.

- An analysis of the components of the dimension management capability be done and further testing on the impact of each component on the reconfiguration of resources should be carried out.

- The study should be repeated in small businesses falling within different stages of the life cycle as well as those falling in different size categories. The former is important in that determining whether the age of a business, whether new or well established has any effect on its strategic processes. The latter will enable a determination of whether size of small business [whether small, medium or micro] has any effect on its strategic processes. This is important since Chapter 2 indicated that there are varying definitions of small businesses emanating from research, government and management spheres.

- The study should be extended broadly across small businesses in different sectors to empirically establish the linkages that have been developed theoretically between management education and the importance perception of managers, the importance perception of managers and the management capability of the small firm, management capability of the small firm and dynamic capabilities or the link between the resource base of the small firm and dynamic capabilities. Following this route, an empirical link between reconfiguration processes and the creation of value-adding strategies and competitive advantage should also be developed.

6.11 CHAPTER CONCLUSIONS

This chapter presented the major findings of this study, showed how the research problem, the research purpose, the research objectives and the research propositions were satisfied and to made recommendations for future areas of research. This chapter also reported on a new strategic model and theory on the strategic processes of small businesses operating in a turbulent environment and presented a summary of the main research findings.

The chapter ended by highlighting the study's main conclusion viz. by the employment of stepwise, rational, specific and targeted interventions and strategies that are designed to initiate and sustain the dynamic capabilities of small businesses operating in a turbulent environment, the dynamic capabilities of these small firms can be strengthened and hence their performance in turbulent environments optimised.

Several recommendations for future research in this area were also made.

ANNEXURES

ANNEXURE 1A – THE PILOT QUESTIONNAIRE

12.07.05

Dear Owner/Managing Pharmacist

Your kind assistance is humbly requested. I am a doctoral student [School of Business Leadership, UNISA] and I require your participation in **a PILOT STUDY** that is necessary for the completion of my research. I am investigating the strategic processes of small businesses operating in a turbulent environment (see attached research summary). Please complete the attached questionnaire, to assist with this study. Your kind assistance will be greatly appreciated.

Note : Since this study deals with small businesses, your participation is required only if you meet the criteria as per the research definition of a small business - a business employing less than 50 workers assumed to be formally registered, clearly demarcated and paying taxes on a regular basis.

Your answers should reflect the unique business factors or resource constraints experienced by your firm. Rating a process as "low" in importance or "not implemented" does not in any way imply poor management. In fact, there is no firm, large or small, that comprehensively and extensively implements all of these processes.

All responses received will be held in strict confidence. All participants are guaranteed that their individual responses shall remain confidential and no individual firm data will be made available to any person or organisation at any time. However by participating in this research, respondents are giving consent for the use of the data for scientific research purposes.

The survey questionnaire consists of five main sections. It should take approximately one hour to complete. The owner/ managing pharmacist should fill in this survey. Any questions concerning the project can be directed to:

Ms KK Naidoo
naidookk@ukzn.ac.za
Cell: 0824948227

Should you be interested in the results of the project, please send me your email address and I will gladly forward the results to you on completion of the project.

The Strategic Processes of Small Businesses:
A Retail Community Pharmacy Perspective

The characteristics of small firms are different from large firms and they demonstrate certain features that can give them advantage over larger firms; however they may be resource impoverished. This constrains their ability to gain and sustain competitive advantage. In addition, turbulent environments make it all the more difficult for these firms to attain this advantage. Research has found that it is often a firm's strategy and the strategic processes it implements that can give a firm advantage over its competitors. Therefore, the purpose this research is to understand the role of strategic processes in small firms operating in a resource constrained and turbulent environment. This research envisages achieving this through an examination of how important the leadership of small businesses perceives firm strategic processes to be and the extent of implementation of these processes in small businesses.

The retail community pharmacy sector will be used as a model to investigate the research propositions generated. It is a sector that is comprised mainly of small businesses and it is currently experiencing turbulence as a result of legislative changes and competition.

SURVEY

The Strategic Processes of Small Businesses:

A Retail Community Pharmacy Perspective

PLEASE INDICATE YOUR ANSWER WITH A CROSS -(X) - IN THE APPROPRIATE BOX.

SECTION I (DEMOGRAPHIC ANALYSIS)

1. Is your pharmacy independently owned or part of a larger group?

Independently Owned	
Part of a Larger Group	

2. Please indicate the number of people employed in your firm.

1-3	
4-49	
50 or more	

3. Please indicate the geographical area in which your pharmacy is situated.

KwaZulu-Natal	
Eastern Cape	
Western Cape	
Northern Cape	
Gauteng	
Limpopo	
North-West Province	
Free State	
Mpumalanga	

4. Please indicate whether your pharmacy is situated in an urban area, a suburban area or a rural area.

URBAN	
SUBURBAN	
RURAL	

5. Please indicate the number of years that your firm is in existence

Less than 5 years	
Between 5-10 years	
More than 10 years	

SECTION II (PROCESS ANALYSIS)

Each process is being analysed from two aspects – level of importance and extent of implementation.

A. How important do you believe this process to be with respect to achieving performance excellence?

Low importance	**Medium importance**	**High importance**
1	**2**	**3**

B. To what extent does your firm carry out this process in order to achieve performance excellence?

Not at all	**Sometimes**	**Extensively**
1	**2**	**3**

PLEASE INDICATE YOUR ANSWER WITH A CROSS- (X) - IN THE APPROPRIATE BOX.

LEADERSHIP						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	1. The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities,	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	2. The leadership of a small business, through both formal [e.g. defined and structured] and informal [e.g. observation] methods, fosters staff empowerment and innovation.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	3. The leadership of a small business serves as a role model for the organisation and all stakeholders.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	4. The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**
Low **1**	**Med** **2**	**High** **3**	5. The leadership of a small business has strong friend, family and professional support networks.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	6. The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: How important do you believe this process to be with respect to achieving performance excellence?			PROCESS	B: To what extent does your firm carry out this process in order to achieve performance excellence?		
Low 1	**Med 2**	**High 3**	7. The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			PROCESS	B: To what extent does your firm carry out this process in order to achieve performance excellence?		
Low 1	**Med 2**	**High 3**	8. The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	9. The leadership of a small business allows the business to co-evolve by fostering, driving and executing multi-business/multi-unit collaborative linkages and managing group dynamics while at the same time empowering staff.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	10. The leadership of a small business leads with an impelling strategic focus while allowing organizational members to be active players in the strategic process. While staff are encouraged and rewarded for experimenting, taking risks and being creative, the small business leadership retains control of the overall goals of the firm is retained by the leadership.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	11. The leadership of a small business develops strategies that are clearly translated into action plans that support the achievement of organizational objectives. Strategies are linked to resources, implementation procedures and defined performance measures.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	12. The leadership of a small business knows what resources [e.g. human, financial, physical, support] are available to the business; their constraints, their capacities and their advantages.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**
Low **1**	**Med** **2**	**High** **3**	13. The leadership of a small business devises appropriate strategies that can maximize any resource advantage and overcome any resource limitation.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

STAFF FOCUS						
A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	14. Key human resource plans are derived from and linked to the overall business strategy with respect to work design; employee development, education and training; compensation and benefits and recruitment.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	15. Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower people and further entrench the organizational culture.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	16. Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	17. Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

CUSTOMERS AND MARKETS						
A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	18. There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	19. A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analyzed as a source of improvement activities.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	20. Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	21. The leadership of small businesses ensures that personalized service is offered to customers.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	22. The skills, knowledge, values and attitudes of the staff and leadership of small businesses are important, relevant, valuable and available to customers.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

PROCESS MANAGEMENT						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	23. The design of key healthcare services and the service delivery process is addressed systematically, incorporating all stakeholders and accounting for changing customer requirements, the environment and technology.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	24. The leadership of a small business ensures that the design of key healthcare services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

MEASUREMENT AND ANALYSIS OF ORGANISATIONAL PERFORMANCE						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	25. The organization regularly measures and analyses organizational performance to provide the information and data to support the organization's strategic planning process, as well as its operational and functional processes to enable continuous improvement.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	26. A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	27. The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business, and positive referral.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	28. Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	29. Key performance measures embedded in the action plans and are used to systematically track progress towards meeting organizational strategies	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	30. Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	31. The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			PROCESS	B: To what extent does your firm carry out this process in order to achieve performance excellence?		
ORGANISATIONAL PERFORMANCE RESULTS						
Low 1	**Med 2**	**High 3**	32. All measures of organizational performance captured by the small business are compared against industry or best-in-class benchmarks	**Not at all 1**	**Sometimes 2**	**Extensively 3**

Thank you!

ANNEXURE 1B – THE FINAL QUESTIONNAIRE

Dear Owner/Managing Pharmacist

Your kind assistance is humbly requested. I am a doctoral student [School of Business Leadership, UNISA] and I require your participation in **RESEARCH STUDY** that is necessary for the completion of my research. I am investigating the strategic processes of small businesses operating in a turbulent environment (see attached research summary). Please complete the attached questionnaire, to assist with this study. Your kind assistance will be greatly appreciated.

Note : Since this study deals with small businesses, your participation is required only if you meet the criteria as per the research definition of a small business - a business employing less than 50 workers assumed to be formally registered, clearly demarcated and paying taxes on a regular basis.

Your answers should reflect the unique business factors or resource constraints experienced by your firm. Rating a process as "low" in importance or "not implemented" does not in any way imply poor management. In fact, there is no firm, large or small, that comprehensively and extensively implements all of these processes.

All responses received will be held in strict confidence. All participants are guaranteed that their individual responses shall remain confidential and no individual firm data will be made available to any person or organisation at any time. However by participating in this research, respondents are giving consent for the use of the data for scientific research purposes.

The survey questionnaire consists of two main sections. It should take approximately one hour to complete. The owner/ managing pharmacist should fill in this survey.

PLEASE COMPLETE THE ATTACHED QUESTIONNAIRE AND RETURN IN THE SELF-ADDRESSED ENVELOPE WITHIN 2 WEEKS OF RECEIPT, TO P.O.BOX 19539, DORMERTON, 4015.

Any questions concerning the project can be directed to:

Ms KK Naidoo
naidookk@ukzn.ac.za
Cell: 0824948227

Should you be interested in the results of the project, please send me your email address and I will gladly forward the results to you on completion of the project.

THANK YOU

Ms.K.K. NAIDOO

The Strategic Processes of Small Businesses:
A Retail Community Pharmacy Perspective

The characteristics of small firms are different from large firms and they demonstrate certain features that can give them advantage over larger firms; however they may be resource impoverished. This constrains their ability to gain and sustain competitive advantage. In addition, turbulent environments make it all the more difficult for these firms to attain this advantage. Research has found that it is often a firm's strategy and the strategic processes it implements that can give a firm advantage over its competitors. Therefore, the purpose this research is to understand the role of strategic processes in small firms operating in a resource constrained and turbulent environment. This research envisages achieving this through an examination of how important the leadership of small businesses perceives firm strategic processes to be and the extent of implementation of these processes in small businesses.

The retail community pharmacy sector will be used as a model to investigate the research propositions generated. It is a sector that is comprised mainly of small businesses and it is currently experiencing turbulence as a result of legislative changes and competition.

SURVEY

The Strategic Processes of Small Businesses:

A Retail Community Pharmacy Perspective

PLEASE INDICATE YOUR ANSWER WITH A CROSS -(X) - IN THE APPROPRIATE BOX.

SECTION I (DEMOGRAPHIC ANALYSIS)

1. Is your pharmacy independently owned or part of a larger group?

Independently Owned	
Part of a Larger Group	

2. Please indicate the number of people employed in your firm.

1-3	
4-49	
50 or more	

3. Please indicate the geographical area in which your pharmacy is situated.

KwaZulu-Natal	
Eastern Cape	
Western Cape	
Northern Cape	
Gauteng	
Limpopo	
North-West Province	
Free State	
Mpumalanga	

4. Please indicate whether your pharmacy is situated in an urban area, a suburban area or a rural area.

URBAN	
SUBURBAN	
RURAL	

5. Please indicate the number of years that your firm is in existence

Less than 5 years	
Between 5-10 years	
More than 10 years	

SECTION II (PROCESS ANALYSIS)

In the following pages, each process under the headings, **LEADERSHIP, STAFF, CUSTOMERS, MEASUREMENT and NETWORKS AND SUPPORT SYSTEMS** is being analysed from two aspects – level of importance and extent of implementation.

PLEASE INDICATE YOUR ANSWER WITH A CROSS- (X) - IN THE APPROPRIATE BOX NEXT TO EACH QUESTION.

A. How important do you believe this process to be with respect to achieving performance excellence?

Low importance	Medium importance	High importance
1	2	3

B. To what extent does your firm carry out this process in order to achieve performance excellence?

Not at all	Sometimes	Extensively
1	2	3

STAFF-KNOWLEDGE,EMPOWERMENT AND MOTIVATION						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	1. The leadership of a small business, through both formal [e.g. defined and structured] and informal [e.g. observation] methods, fosters staff empowerment and innovation.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	2. The leadership of a small business allows the business to co-evolve by fostering, driving and executing multi-business/multi-unit collaborative linkages and managing group dynamics while at the same time empowering staff.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	3. Work and job descriptions are created, organized and managed in such a manner so as to promote cooperation, initiative and innovation as well as to empower staff and further entrench the organizational culture.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	4. Staff education, development and training activities are structured to balance organizational objectives with employees' individual knowledge and skills needs and are jointly designed by the employees concerned and the small business leadership detailing specific needs, objectives and performance measures, clearly.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	5. The skills, knowledge, values and attitudes of the staff and leadership are important, relevant, valuable and available to customers.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	6. A variety of employee support services (well being and motivation) are available, and are periodically evaluated and improved to meet employee's needs.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**
Low **1**	**Med** **2**	**High** **3**	7. Employees and other stakeholders who need information to effectively perform their work have convenient access to all necessary information.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

STAFF - REWARD						
A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	8. The leadership of a small business leads with an impelling strategic focus while allowing and rewarding organizational members for being active players in the strategic process. While staff are encouraged and rewarded for experimenting, taking risks and being creative, the small business leadership at the same time retains control of the overall goals of the firm.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**
Low **1**	**Med** **2**	**High** **3**	9. Key human resource plans are derived from and linked to the overall business strategy with respect to compensation, benefits and recruitment.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	10. Compensation and recognition approaches for individuals and groups, reinforces performance, teamwork, and learning and business objectives	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

LEADERSHIP						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	11. The leadership of a small business serves as a role model for the organisation and all stakeholders.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	12. The leadership of a small business has a few simple rules to guide its strategic processes instead of elaborate strategies [a simple standard operating procedure is devised to guide decision making]. These rules focus on : – how to carry out key processes; knowing which opportunities to pursue and which should not be considered; being able to rank the accepted opportunities; to synchronize the pace of emerging opportunities and other parts of the company and when to pull out of yesterday's opportunities.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	13. The leadership of a small business ensures that the design of key healthcare services and the service delivery process incorporates quality and operational performance requirements such as cost control, health, safety, and environmental impacts, process capability, maintainability, supplier capability and cycle time.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: **How important do you believe this process to be with respect to achieving performance excellence?**			**PROCESS**	**B:** **To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low **1**	**Med** **2**	**High** **3**	14. The leadership of a small business patches and restructures the business portfolio by creating an enterprise structure that consists of patches [units/modules], in order to fit changing market opportunities. In this type of structure, the business units are modular, focused and discrete so that they can be combine seamlessly; there is access to trends and knowledge that can help to predict when to restructure the business; there is an ability to recognize patterns and trends that develop in the market place; market segmentation which reveals how to optimally configure patches [units/modules] to exploit market opportunities, is clearly understood; road maps which suggest how future patches [units/modules] are likely to evolve, are available.	**Not at all** **1**	**Sometimes** **2**	**Extensively** **3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	15. The leadership of a small business develops strategies that are clearly translated into action plans that support the achievement of organizational objectives. Strategies are linked to resources , implementation procedures and defined performance measures.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	16. The leadership of a small business knows what resources [e.g. human, financial, physical, support] are available to the business; their constraints, their capacities and their advantages.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	17. The leadership of a small business devises appropriate strategies that can maximize any resource advantage and overcome any resource limitation.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	18. The leadership of small businesses ensures that personalized service is offered to customers	**Not at all 1**	**Sometimes 2**	**Extensively 3**

MEASUREMENT						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	19. The organization regularly measures and analyses organizational performance to provide the information and data to support the organization's strategic planning process, as well as its operational and functional processes to enable continuous improvement.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	20. Key information and data - financial and non-financial- is clearly linked to the organisation's processes and goals, and are systematically gathered and used to track and improve the company's performance at all levels.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	21. Key performance measures embedded in the action plans and are used to systematically track progress towards meeting organizational strategies	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	22. The type and quality of data and information collected, as well as its usage and effectiveness, are periodically evaluated, improved and kept current with changing trends.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	23. All measures of organizational performance captured by the small business are compared against industry or best-in-class benchmarks	**Not at all 1**	**Sometimes 2**	**Extensively 3**

CUSTOMERS						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	24. There is ease of access for small businesses customers when they are seeking information or assistance and/or when they wish to comment or complain.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	25. A complaint management process exists that ensures complaints are not only resolved effectively and promptly but are also analyzed as a source of improvement activities.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	26. Good relationships with customers are actively pursued and maintained by both staff and the leadership of small businesses.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	27. The design of key healthcare services and the service delivery process is addressed systematically accounting for changing customer requirements.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	28. The company gathers information about customer satisfaction for all key customer segments and captures information that reflects transaction quality, customer repurchase, new business, and positive referral.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

NETWORKS AND SUPPORT SYSTEMS						
A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	29. The leadership of a small business takes into account the needs and expectations of all stakeholders, the changing, turbulent and competitive environment, regulatory, financial, market, technological, societal and other risks as well as factors unique to the organization, when establishing organisational values, organisational directions and performance expectations as well as when looking for business opportunities.	**Not at all 1**	**Sometimes 2**	**Extensively 3**

A: How important do you believe this process to be with respect to achieving performance excellence?			**PROCESS**	**B: To what extent does your firm carry out this process in order to achieve performance excellence?**		
Low 1	**Med 2**	**High 3**	30. The leadership of a small business uses its involvement with its communities and professional associations to both support and strengthen those communities and associations as well as the business.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	31. The leadership of a small business has strong friend, family and professional support networks.	**Not at all 1**	**Sometimes 2**	**Extensively 3**
Low 1	**Med 2**	**High 3**	32. The leadership of a small business takes into account its legal, ethical and risk requirements, in its decision-making processes	**Not at all 1**	**Sometimes 2**	**Extensively 3**

ANNEXURE 2

TABLE 1: DESCRIPTIVE STATISTICS [SECTION 2A]

	Mean	Std. Deviation	Analysis N
Q2.1A	2.90	.316	10
Q2.2A	2.80	.422	10
Q2.3A	2.70	.675	10
Q2.4A	2.80	.422	10
Q2.5A	2.90	.316	10
Q2.6A	2.80	.422	10
Q2.7A	2.80	.422	10
Q2.8A	2.30	.483	10
Q2.9A	2.40	.516	10
Q2.10A	2.20	.789	10
Q2.11A	2.60	.516	10
Q2.12A	3.00	.000	10
Q2.13A	2.60	.516	10
Q2.14A	2.60	.516	10
Q2.15A	2.90	.316	10
Q2.16A	2.70	.483	10
Q2.17A	2.90	.316	10
Q2.18A	3.00	.000	10
Q2.19A	2.60	.699	10
Q2.20A	2.90	.316	10
Q2.21A	3.00	.000	10
Q2.22A	3.00	.000	10
Q2.23A	2.70	.483	10
Q2.24A	2.70	.483	10
Q2.25A	2.40	.699	10
Q2.26A	2.60	.516	10
Q2.27A	2.60	.699	10
Q2.28A	2.90	.316	10
Q2.29A	2.70	.675	10
Q2.30A	2.60	.516	10
Q2.31A	2.30	.823	10
Q2.32A	2.20	.789	10

TABLE 2: ALPHA COEFFICIENTS [SECTION 2A]

SCALE	No. of cases	No. of items	ALPHA
LEADERSHIP Q1A-13A	10	13	0.5718
STAFF FOCUS Q14A-17A	10	4	0.3895
PATIENTS, CUSTOMERS AND OTHER MARKETS Q18A-22A	10	5	-0.2222
PROCESS MANAGEMENT Q23A-24A	10	2	1
MEASUREMENT AND ANALYSIS OF ORGANISATIONAL PERFORMANCE Q25A-31A	10	7	0.9068
ORGANISATIONAL PERFORMANCE RESULTS Q32A	10	1	No alpha value

TABLE 3: DESCRIPTIVE STATISTICS [SECTION 2B]

	Mean	Std. Deviation	Analysis N
Q2.1B	2.20	.422	10
Q2.2B	2.30	.823	10
Q2.3B	2.20	.919	10
Q2.4B	2.10	.316	10
Q2.5B	2.20	.632	10
Q2.6B	2.20	.422	10
Q2.7B	2.10	.876	10
Q2.8B	1.80	.632	10
Q2.9B	2.30	.823	10
Q2.10B	2.20	.919	10
Q2.11B	2.10	.738	10
Q2.12B	2.30	.483	10
Q2.13B	1.80	.632	10
Q2.14B	2.30	.675	10
Q2.15B	2.30	.823	10
Q2.16B	2.30	.675	10
Q2.17B	2.80	.422	10
Q2.18B	2.40	.699	10
Q2.19B	1.90	.568	10
Q2.20B	1.80	.789	10
Q2.21B	1.90	.738	10
Q2.22B	2.80	.422	10
Q2.23B	1.90	.568	10
Q2.24B	1.90	.568	10
Q2.25B	2.60	.516	10
Q2.26B	2.80	.422	10
Q2.27B	2.40	.699	10
Q2.28B	2.60	.516	10
Q2.29B	2.60	.516	10
Q2.30B	2.70	.483	10
Q2.31B	2.60	.516	10
Q2.32B	2.60	.516	10

TABLE 4: ALPHA COEFFICIENTS [SECTION 2B]

SCALE	No. of cases	No. of items	ALPHA
LEADERSHIP Q1B-13B	10	13	0.8904
STAFF FOCUS Q14B-17B	10	4	0.89265
PATIENTS, CUSTOMERS AND OTHER MARKETS Q18B-22B	10	5	0.8138
PROCESS MANAGEMENT Q23B-24B	10	2	0.7917
MEASUREMENT AND ANALYSIS OF ORGANISATIONAL PERFORMANCE Q25B-31B	10	7	0.9089
ORGANISATIONAL PERFORMANCE RESULTS Q32B	10	1	No alpha value

ANNEXURE 3

TABLE 5: TOTAL VARIANCE EXPLAINED [SECTION 2B]

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**14.805**	**46.265**	46.265	14.805	46.265	46.265	7.706	24.083	24.083
2	**5.446**	**17.017**	63.283	5.446	17.017	63.283	6.555	20.484	44.567
3	**4.586**	**14.332**	77.615	4.586	14.332	77.615	6.298	19.680	64.246
4	**2.212**	**6.913**	84.528	2.212	6.913	84.528	4.810	15.033	79.279
5	**2.110**	**6.593**	91.121	2.110	6.593	91.121	3.789	11.842	91.121
6	.992	3.100	94.221						
7	.869	2.716	96.937						
8	.581	1.814	98.751						
9	.400	1.249	100.000						
10	2.406E-15	7.519E-15	100.000						
11	5.327E-16	1.665E-15	100.000						
12	2.951E-16	9.221E-16	100.000						
13	2.287E-16	7.146E-16	100.000						
14	2.154E-16	6.730E-16	100.000						
15	1.445E-16	4.515E-16	100.000						
16	9.531E-17	2.978E-16	100.000						
17	6.145E-17	1.920E-16	100.000						
18	2.495E-17	7.796E-17	100.000						
19	1.164E-17	3.639E-17	100.000						

Component	Initial Eigen values	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings						
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
20	3.526E-18	1.102E-17	100.000						
21	-5.536E-32	-1.730E-31	100.000						
22	-2.361E-17	-7.378E-17	100.000						
23	-8.440E-17	-2.637E-16	100.000						
24	-1.051E-16	-3.285E-16	100.000						
25	-1.991E-16	-6.222E-16	100.000						
26	-2.691E-16	-8.410E-16	100.000						
27	-2.851E-16	-8.908E-16	100.000						
28	-2.942E-16	-9.195E-16	100.000						
29	-4.166E-16	-1.302E-15	100.000						
30	-5.993E-16	-1.873E-15	100.000						
31	-1.223E-15	-3.820E-15	100.000						
32	-1.507E-15	-4.708E-15	100.000						

Extraction Method: Principal Component Analysis.

GRAPH 1: SCREE PLOT [SECTION 2B]

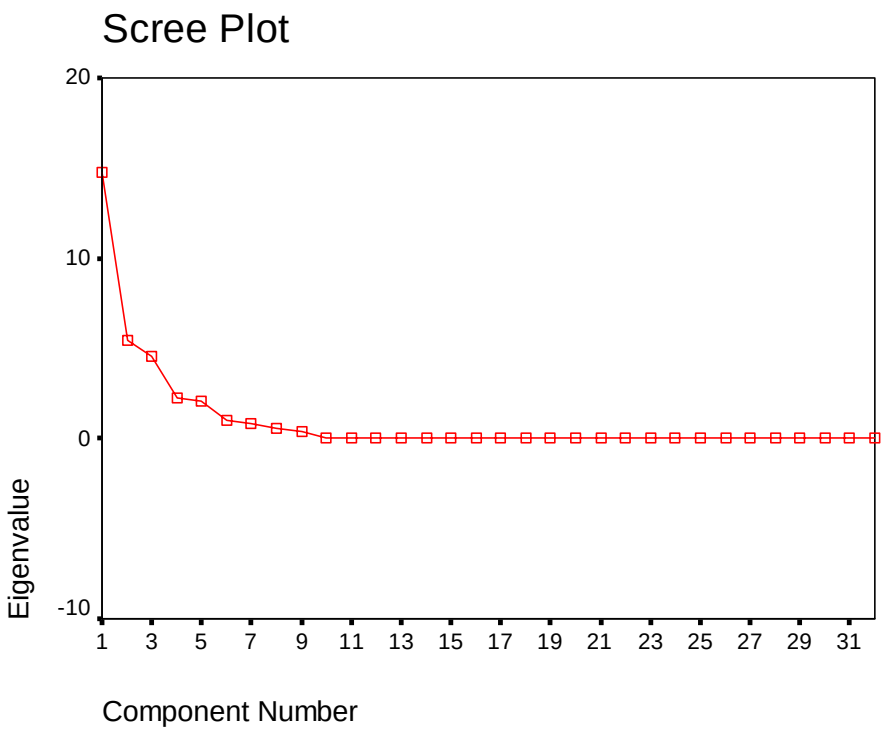


TABLE 6: ROTATED COMPONENT MATRIX [SECTION 2B]

	Component				
	1	2	3	4	5
Q2.1B	.228				.953
Q2.2B	.801	.402	.361		
Q2.3B		.620	.174	.540	
Q2.4B		.415	.184	.410	.702
Q2.5B	.168	.218		-.138	.750
Q2.6B	.228				.953
Q2.7B		.929		.146	
Q2.8B	.203	.872	.157	.254	.190
Q2.9B	.801	.402	.361		
Q2.10B	.744			.414	.375
Q2.11B	.387	.710	.137	.367	-.162
Q2.12B	.217	.592	.368	.222	.235
Q2.13B	.203	.872	.157	.254	.190
Q2.14B	.812	.196	-.191	.183	.360
Q2.15B	.801	.402	.361		
Q2.16B	.812	.196	-.191	.183	.360
Q2.17B	.862		.472		
Q2.18B	.213	.163	.269	.846	-.280
Q2.19B	-.194	.426		.831	.197
Q2.20B	.436	.324	.348	.697	.123
Q2.21B	.186	.923	.246	.101	
Q2.22B	.862		.472		
Q2.23B	-.194	.426		.831	.197
Q2.24B	.197	.653	.369	.497	
Q2.25B	.209	.210	.934	.171	
Q2.26B	.862		.472		
Q2.27B	.213	.163	.269	.846	-.280
Q2.28B	.209	.210	.934	.171	
Q2.29B	.209	.210	.934	.171	
Q2.30B	.786	.350	.183	-.221	.231
Q2.31B	.209	.210	.934	.171	
Q2.32B	.209	.210	.934	.171	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

ANNEXURE 4

TABLE 6: THE NEWLY DEFINED FACTORS OF SECTION 2B

ITEM (QUESTION)	**FACTOR**
2,9,10,14,15,16,17,22,26,30	STAFF
3,7,8,11,12,13,21,24	LEADERSHIP
25,28,29,31,32	MEASUREMENT
18,19,20,23,27	CUSTOMERS
1,4,5,6	NETWORKS AND SUPPORT SYSTEMS

ANEXURE 5

TABLE 7: ALPHA VALUES [SECTION 2B-LEADERSHIP]

Alpha	**= 0.9523**
N (cases)	**=10**
N (items	**=8**

TABLE 8: DESCRIPTIVE STATISTICS [SECTION 2B-LEADERSHIP]

	Mean	Std. Deviation	Analysis N
Q2.3B	2.20	.919	10
Q2.7B	2.10	.876	10
Q2.8B	1.80	.632	10
Q2.11B	2.10	.738	10
Q2.12B	2.30	.483	10
Q2.13B	1.80	.632	10
Q2.21B	1.90	.738	10
Q2.24B	1.90	.568	10

TABLE 9: TOTAL VARIANCE EXPLAINED [SECTION 2B-LEADERSHIP]

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.231	77.884	77.884	6.231	77.884	77.884
2	.671	8.383	86.267			
3	.417	5.209	91.477			
4	.358	4.471	95.948			
5	.222	2.775	98.722			
6	.069	.857	99.580			
7	.034	.420	100.000			
8	-2.358E-18	-2.948E-17	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 2: SCREE PLOT [SECTION 2B-LEADERSHIP]

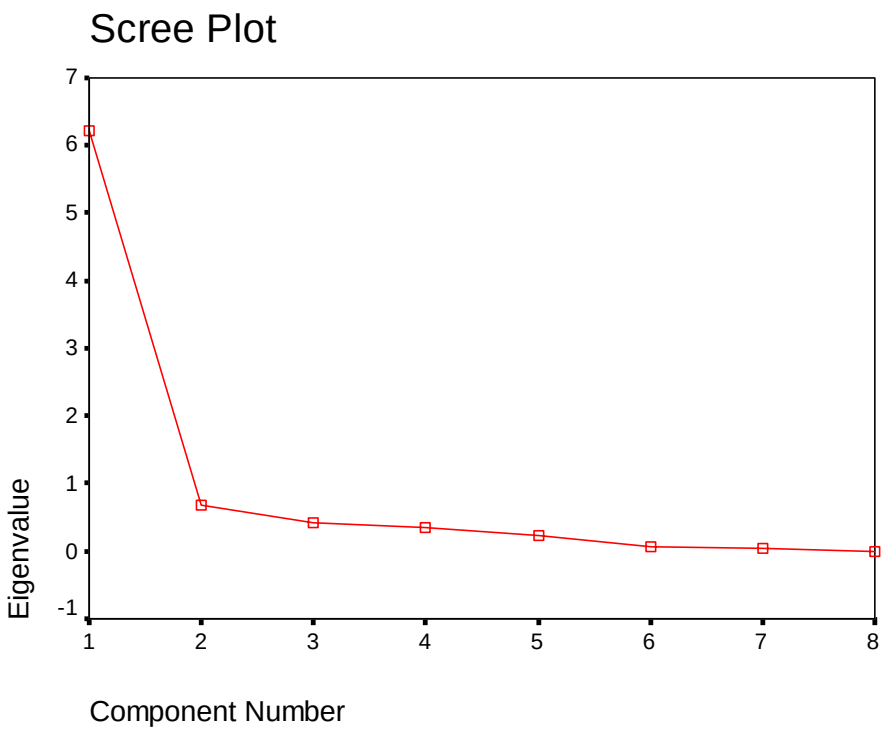


TABLE 10: COMPONENT MATRIX [SECTION 2B-LEADERSHIP]

	Component
	1
Q2.3B	.802
Q2.7B	.914
Q2.8B	.946
Q2.11B	.854
Q2.12B	.733
Q2.13B	.946
Q2.21B	.954
Q2.24B	.887

Extraction Method: Principal Component Analysis.

NOTES:

Rotated Component Matrix (a)

A Only one component was extracted. The solution cannot be rotated.

ANNEXURE 6

TABLE 11: ALPHA VALUES [SECTION 2B-STAFF]

Alpha	**= 0.9538**
N (cases)	**=10**
N (items	**=10**

TABLE 12: DESCRIPTIVE STATISTICS [SECTION 2B-STAFF]

	Mean	Std. Deviation	Analysis N
Q2.2B	2.30	.823	10
Q2.9B	2.30	.823	10
Q2.10B	2.20	.919	10
Q2.14B	2.30	.675	10
Q2.15B	2.30	.823	10
Q2.16B	2.30	.675	10
Q2.17B	2.80	.422	10
Q2.22B	2.80	.422	10
Q2.26B	2.80	.422	10
Q2.30B	2.70	.483	10

TABLE 13: TOTAL VARIANCE EXPLAINED [STAFF]

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**7.790**	77.899	77.899	7.790	77.899	77.899	5.627	56.269	56.269
2	**1.183**	11.831	89.729	1.183	11.831	89.729	3.346	33.460	89.729
3	.603	6.033	95.762						
4	.292	2.918	98.679						
5	.132	1.321	100.000						
6	2.726E-16	2.726E-15	100.000						
7	2.443E-17	2.443E-16	100.000						
8	.000	.000	100.000						
9	-1.892E-16	-1.892E-15	100.000						
10	-2.246E-16	-2.246E-15	100.000						

Extraction Method: Principal Component Analysis.

GRAPH 3: SCREE PLOT [SECTION 2B-STAFF]

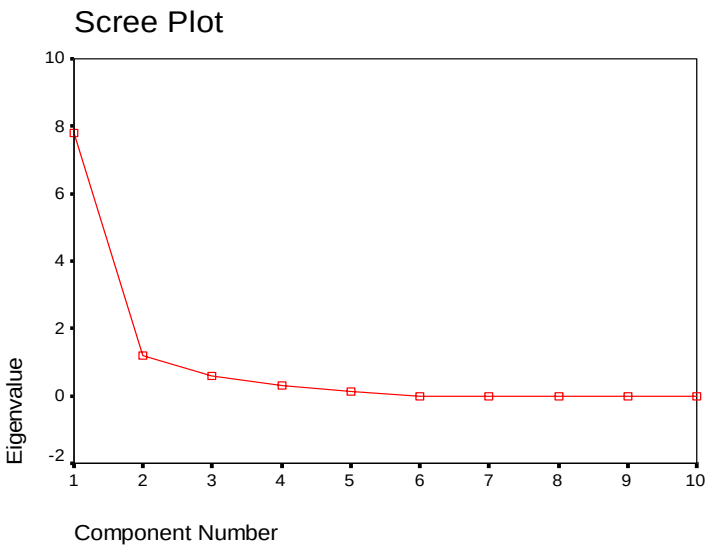


TABLE 14: ROTATED COMPONENT MATRIX

	Component	
	1	2
Q2.2B	.925	.285
Q2.9B	.925	.285
Q2.10B	.330	.851
Q2.14B	.343	.906
Q2.15B	.925	.285
Q2.16B	.343	.906
Q2.17B	.850	.418
Q2.22B	.850	.418
Q2.26B	.850	.418
Q2.30B	.740	.461

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

ANNEXURE 7

TABLE 15: THE NEWLY DEFINED SUB-FACTORS OF THE FACTOR STAFF

ITEM **(QUESTION)**	**FACTOR**
2,9,15,17,22,26,30	KNOWLEDGE, EMPOWERMENT AND MOTIVATION
10,14,16	REWARD

ANNEXURE 8

TABLE 16: ALPHA VALUES [SECTION 2B-STAFF-KNOWLEDGE, EMPOWERMENT AND MOTIVATION]

Alpha	**= 0.9625**
N (cases)	**=10**
N (items	**=7**

TABLE 17: DESCRIPTIVE STATISTICS [SECTION 2B-STAFF-KNOWLEDGE, EMPOWERMENT AND MOTIVATION]

	Mean	Std. Deviation	Analysis N
Q2.2B	2.30	.823	10
Q2.9B	2.30	.823	10
Q2.15B	2.30	.823	10
Q2.17B	2.80	.422	10
Q2.22B	2.80	.422	10
Q2.26B	2.80	.422	10
Q2.30B	2.70	.483	10

TABLE 18: TOTAL VARIANCE EXPLAINED [SECTION 2B-STAFF –KNOWLEDGE, EMPOWERMENT AND MOTIVATION]

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.210	88.716	88.716	6.210	88.716	88.716
2	.516	7.367	96.082			
3	.274	3.918	100.000			
4	3.853E-17	5.505E-16	100.000			
5	2.031E-34	2.902E-33	100.000			
6	.000	.000	100.000			
7	-1.681E-16	-2.401E-15	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 4: SCREE PLOT [SECTION 2B-STAFF-KNOWLEDGE, EMPOWERMENT AND MOTIVATION]

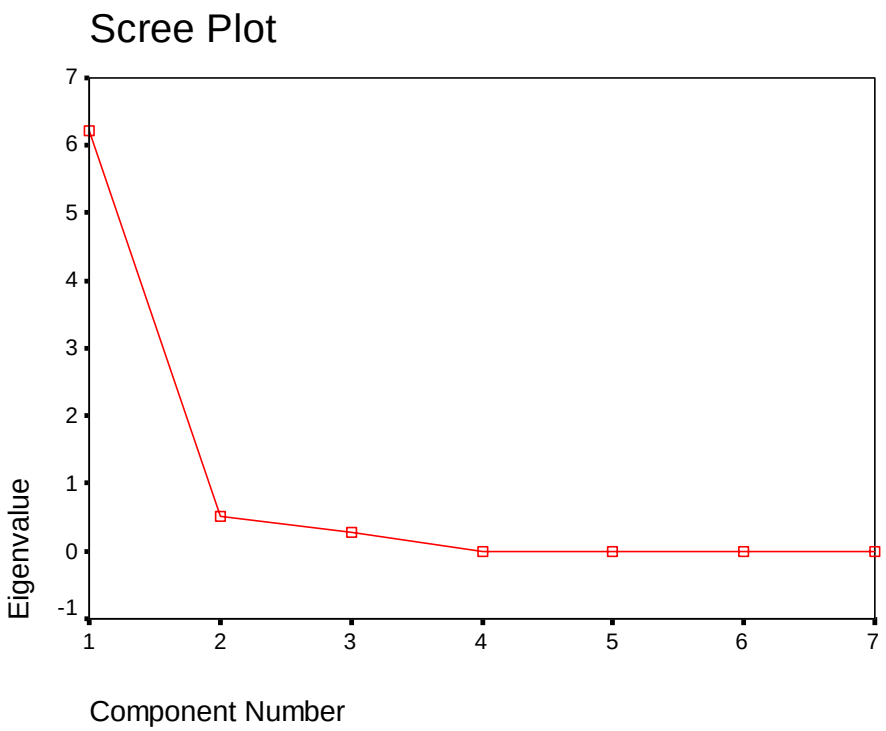


TABLE 19: COMPONENT MATRIX [SECTION 2B-STAFF-KNOWLEDGE, EMPOWERMENT AND MOTIVATION]

	Component
	1
Q2.2B	.958
Q2.9B	.958
Q2.15B	.958
Q2.17B	.951
Q2.22B	.951
Q2.26B	.951
Q2.30B	.865

Extraction Method: Principal Component Analysis.

NOTES:

Rotated Component Matrix (a)

a Only one component was extracted. The solution cannot be rotated.

ANNEXURE 9

TABLE 20: ALPHA VALUES [SECTION 2B-STAFF-REWARD]

Alpha	**= 0.9303**
N (cases)	**=10**
N (items	**=3**

TABLE 21: DESCRIPTIVE STATISTICS [SECTION 2B-STAFF-REWARD]

	Mean	Std. Deviation	Analysis N
Q2.10B	2.20	.919	10
Q2.14B	2.30	.675	10
Q2.16B	2.30	.675	10

TABLE 22: TOTAL VARIANCE EXPLAINED [SECTION 2B-STAFF-REWARD]

	Initial Eigen values			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.722	90.724	90.724	2.722	90.724	90.724
2	.278	9.276	100.000			
3	2.856E-17	9.519E-16	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 5: SCREE PLOT [SECTION 2B-STAFF-REWARD]

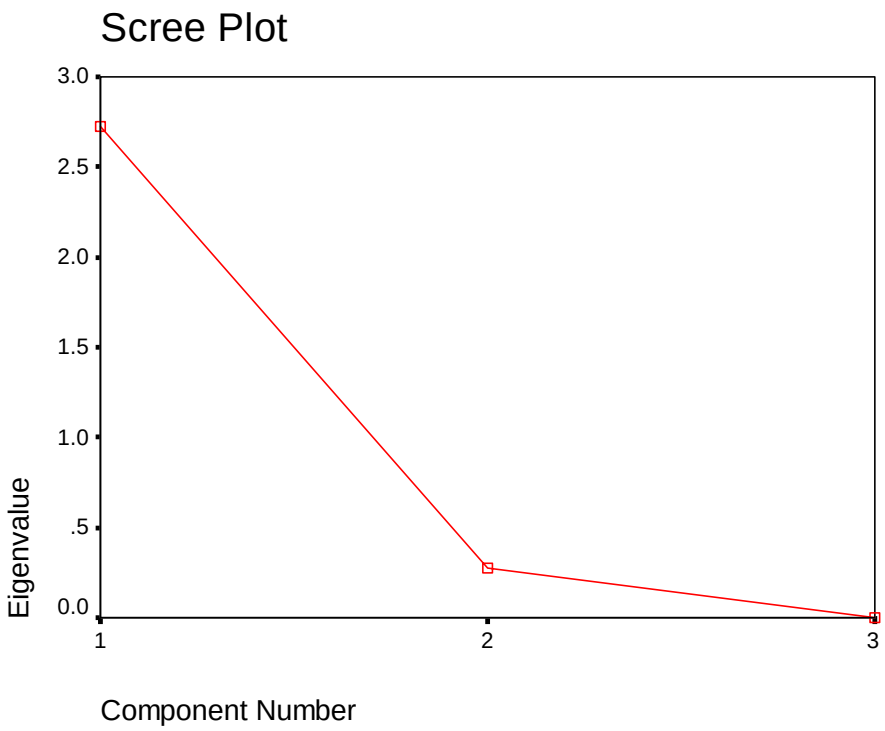


Table 23: Component Matrix [SECTION 2B-STAFF-REWARD]

	Component
	1
Q2.10B	.897
Q2.14B	.979
Q2.16B	.979

Extraction Method: Principal Component Analysis.

NOTES:

Rotated Component Matrix (a)

a Only one component was extracted. The solution cannot be rotated.

ANNEXURE 10

TABLE 24: ALPHA VALUES [SECTION 2B-CUSTOMERS]

Alpha	**= 0.9359**
N (cases)	**=10**
N (items	**=5**

TABLE 25: DESCRIPTIVE STATISTICS [SECTION 2B-CUSTOMERS]

	Mean	Std. Deviation	Analysis N
Q2.18B	2.40	.699	10
Q2.19B	1.90	.568	10
Q2.20B	1.80	.789	10
Q2.23B	1.90	.568	10
Q2.27B	2.40	.699	10

TABLE 26: TOTAL VARIANCE EXPLAINED [SECTION 2B-CUSTOMERS]

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.045	80.891	80.891	4.045	80.891	80.891
2	.667	13.341	94.232			
3	.288	5.768	100.000			
4	8.290E-19	1.658E-17	100.000			
5	-3.098E-16	-6.197E-15	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 6: SCREE PLOT [SECTION 2B-CUSTOMERS]

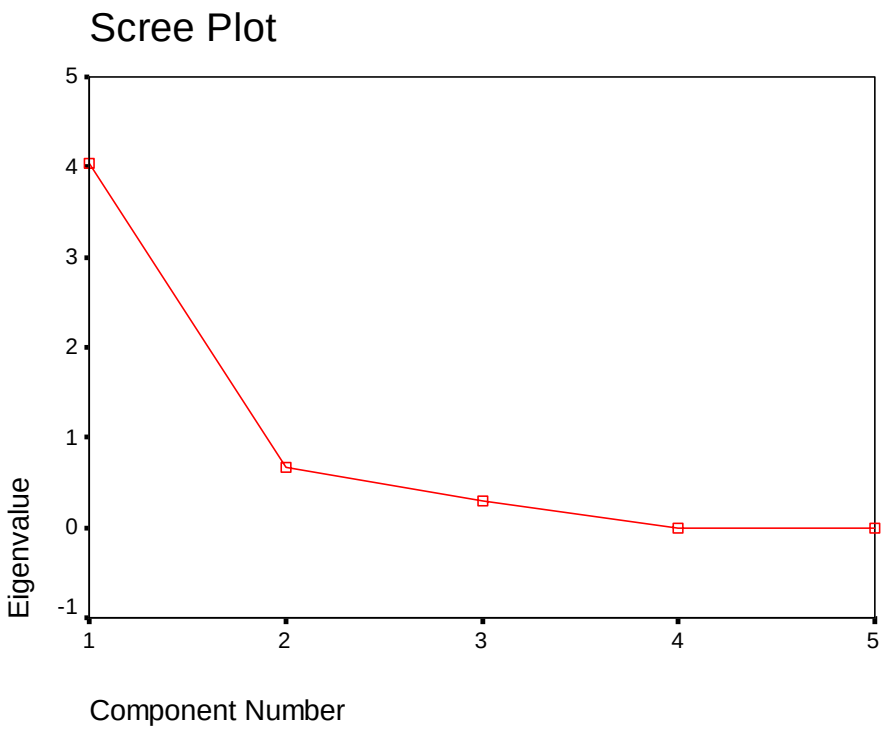


TABLE 27: COMPONENT MATRIX [SECTION 2B-CUSTOMERS]

	Component
	1
Q2.18B	.916
Q2.19B	.897
Q2.20B	.870
Q2.23B	.897
Q2.27B	.916

Extraction Method: Principal Component Analysis.

NOTES:

Rotated Component Matrix (a)

a Only one component was extracted. The solution cannot be rotated.

ANNEXURE 11

TABLE 28: ALPHA VALUES [SECTION 2B-MEASUREMENT]

Alpha	**= 1**
N (cases)	**=10**
N (items)	**=5**

TABLE 29: DESCRIPTIVE STATISTICS [SECTION 2B-MEASUREMENT]

	Mean	Std. Deviation	Analysis N
Q2.25B	2.60	.516	10
Q2.32B	2.60	.516	10
Q2.28B	2.60	.516	10
Q2.29B	2.60	.516	10
Q2.31B	2.60	.516	10

TABLE 30: TOTAL VARIANCE EXPLAINED [SECTION 2B-MEASUREMENT]

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.000	100.000	100.000	5.000	100.000	100.000
2	3.331E-16	6.661E-15	100.000			
3	1.110E-16	2.220E-15	100.000			
4	1.110E-16	2.220E-15	100.000			
5	-2.220E-16	-4.441E-15	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 7: SCREE PLOT [SECTION 2B-MEASUREMENT]

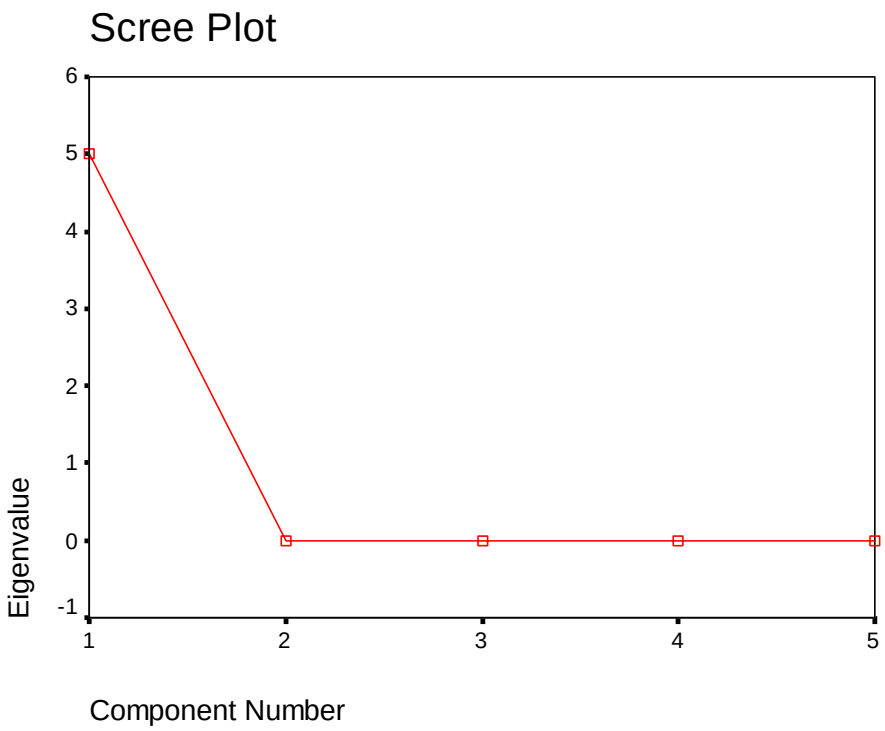


TABLE 31: COMPONENT MATRIX [SECTION 2B-MEASUREMENT]

	Component
	1
Q2.25B	1.000
Q2.32B	1.000
Q2.28B	1.000
Q2.29B	1.000
Q2.31B	1.000

Extraction Method: Principal Component Analysis.

NOTES;

Rotated Component Matrix (a)

a Only one component was extracted. The solution cannot be rotated.

ANNEXURE 12

TABLE 32: ALPHA VALUES [SECTION 2B- NETWORKS AND SUPPORT SYSTEMS]

Alpha	**= 0.8688**
N (cases)	**=10**
N (items)	**=4**

TABLE 33: DESCRIPTIVE STATISTICS [SECTION 2B- NETWORKS AND SUPPORT SYSTEMS]

	Mean	Std. Deviation	Analysis N
Q2.1B	2.20	.422	10
Q2.4B	2.10	.316	10
Q2.5B	2.20	.632	10
Q2.6B	2.20	.422	10

TABLE 34: TOTAL VARIANCE EXPLAINED [SECTION 2B- NETWORKS AND SUPPORT SYSTEMS]

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.084	77.105	77.105	3.084	77.105	77.105
2	.556	13.889	90.993			
3	.360	9.007	100.000			
4	1.202E-16	3.006E-15	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 8: SCREE PLOT [SECTION 2B- NETWORKS AND SUPPORT SYSTEMS]

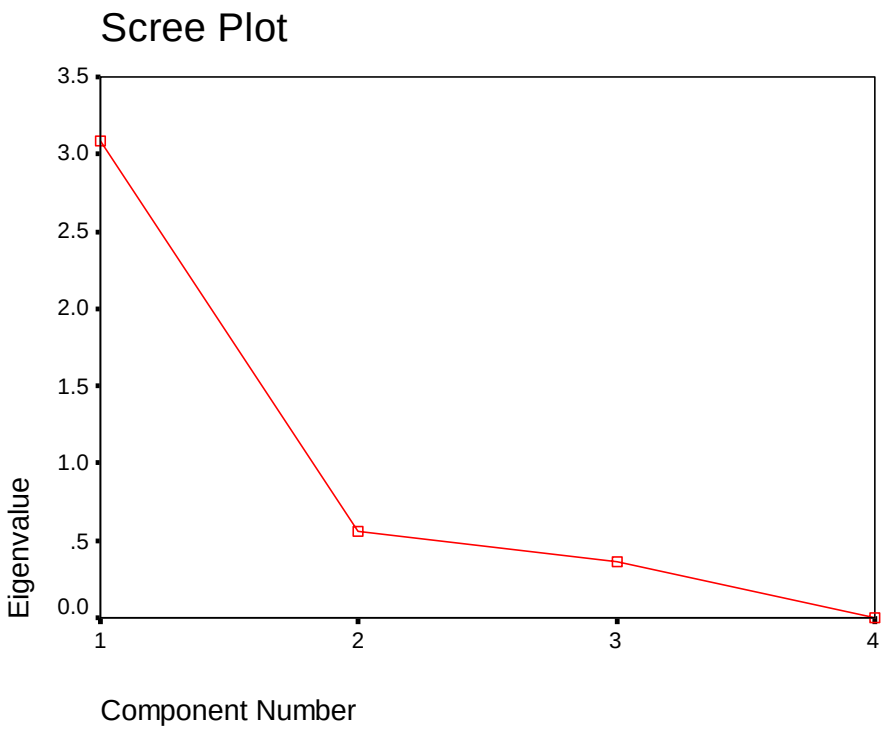


TABLE 35: COMPONENT MATRIX [SECTION 2B- NETWORKS AND SUPPORT SYSTEMS]

	Component
	1
Q2.1B	.963
Q2.4B	.783
Q2.5B	.783
Q2.6B	.963

Extraction Method: Principal Component Analysis.

NOTES:

Rotated Component Matrix (a)

a Only one component was extracted. The solution cannot be rotated.

ANNEXURE 13

TABLE 36:DESCRIPTIVE STATISTICS [SECTION 2A]

	Mean	Std. Deviation	Analysis N
Q2.1A	2.90	.301	130
Q2.2A	2.80	.402	130
Q2.3A	2.70	.643	130
Q2.4A	2.80	.402	130
Q2.5A	2.90	.301	130
Q2.6A	2.80	.402	130
Q2.7A	2.80	.402	130
Q2.8A	2.30	.460	130
Q2.9A	2.40	.492	130
Q2.10A	2.20	.751	130
Q2.11A	2.60	.492	130
Q2.12A	3.00	.000	130
Q2.13A	2.60	.492	130
Q2.14A	2.60	.492	130
Q2.15A	2.90	.301	130
Q2.16A	2.70	.460	130
Q2.17A	2.90	.301	130
Q2.18A	3.00	.000	130
Q2.19A	2.60	.666	130
Q2.20A	2.90	.301	130
Q2.21A	3.00	.000	130
Q2.22A	3.00	.000	130
Q2.23A	2.70	.460	130
Q2.24A	2.70	.460	130
Q2.25A	2.40	.666	130
Q2.26A	2.60	.492	130
Q2.27A	2.60	.666	130
Q2.28A	2.90	.301	130
Q2.29A	2.70	.643	130
Q2.30A	2.60	.492	130
Q2.31A	2.30	.784	130
Q2.32A	2.20	.751	130

TABLE 37: ALPHA COEFFICIENTS [SECTION 2A]

SCALE	No. of cases	No.of items	ALPHA
STAFF KNOWLEDGE EMPOWERMENT AND MOTIVATION	130	7	0.4527
STAFF REWARD	130	3	0.6036
LEADERSHIP GENERAL	130	6	0.5745
LEADERSHIP TURBULENCE	130	2	No alpha value
MEASUREMENT	130	5	0.3437
CUSTOMERS	130	5	0.8429
NETWORKS	130	4	0.8630

TABLE 38: DESCRIPTIVE STATISTICS [SECTION 2B]

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Q1SK	2.22	.760	130
Q2SK	2.30	.784	130
Q3SK	2.12	.711	130
Q4SK	2.80	.402	130
Q5SK	2.80	.402	130
Q6SK	2.80	.402	130
Q7SK	2.70	.460	130
Q8SR	2.30	.460	130
Q9SR	2.28	.449	130
Q10SR	2.31	.463	130
Q11L	1.83	.612	130
Q12L	1.84	.607	130
Q13L	1.88	.659	130
Q14L	1.82	.616	130
Q15L	1.86	.644	130
Q16L	2.11	.696	130
Q17L	1.86	.644	130
Q18L	1.83	.612	130
Q19M	1.91	.549	130
Q20M	1.83	.759	130
Q21M	2.41	.679	130
Q22M	1.91	.549	130
Q23M	1.83	.759	130
Q24C	2.21	.407	130
Q25C	2.20	.402	130
Q26C	2.20	.402	130
Q27C	2.20	.402	130
Q28C	2.20	.402	130
Q29N	2.58	.526	130
Q30N	2.58	.511	130
Q31N	2.58	.511	130
Q32N	2.58	.511	130

TABLE 39: ALPHA COEFFICIENTS [SECTION 2B]

SCALE	**No. of cases**	**No.of items**	**ALPHA**
STAFF KNOWLEDGE EMPOWERMENT AND MOTIVATION	130	7	0.8642
STAFF REWARD	130	3	0.8066
LEADERSHIP	130	8	0.9115
SUB-FACTORS LEADERSHIP GENERAL	130	6	0.9248
LEADERSHIP TURBULENCE	130	2	0.7711
MEASUREMENT	130	5	0.9343
CUSTOMERS	130	5	0.8323
NETWORKS	130	4	0.9379

TABLE 40: TOTAL VARIANCE EXPLAINED [SECTION 2B]

	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**10.853**	**33.914**	33.914	10.853	33.914	33.914	4.962	15.507	15.507
2	**4.139**	**12.934**	46.849	4.139	12.934	46.849	4.876	15.237	30.743
3	**3.936**	**12.301**	59.150	3.936	12.301	59.150	4.369	13.654	44.397
4	**2.339**	**7.310**	66.460	2.339	7.310	66.460	3.690	11.531	55.928
5	**1.422**	**4.444**	70.904	1.422	4.444	70.904	3.648	11.400	67.328
6	**1.201**	**3.754**	74.658	1.201	3.754	74.658	2.346	7.330	74.658
7	.957	2.990	77.648						
8	.950	2.968	80.616						
9	.735	2.298	82.914						
10	.701	2.191	85.105						
11	.632	1.976	87.082						
12	.551	1.721	88.802						
13	.502	1.568	90.370						
14	.449	1.404	91.774						
15	.405	1.267	93.041						
16	.347	1.083	94.124						
17	.328	1.025	95.149						
18	.308	.963	96.112						
19	.254	.795	96.907						
20	.209	.653	97.560						
21	.188	.588	98.148						
22	.163	.509	98.657						
23	.106	.331	98.988						

24	.094	.295	99.283						
25	.083	.260	99.542						
26	.053	.166	99.708						
27	.041	.128	99.836						
28	.025	.080	99.916						
29	.018	.055	99.971						
30	.009	.029	100.000						
31	1.138E-16	3.558E-16	100.000						
32	7.438E-17	2.324E-16	100.000						

Extraction Method: Principal Component Analysi

GRAPH 9 : SCREE PLOT [SECTION 2B]

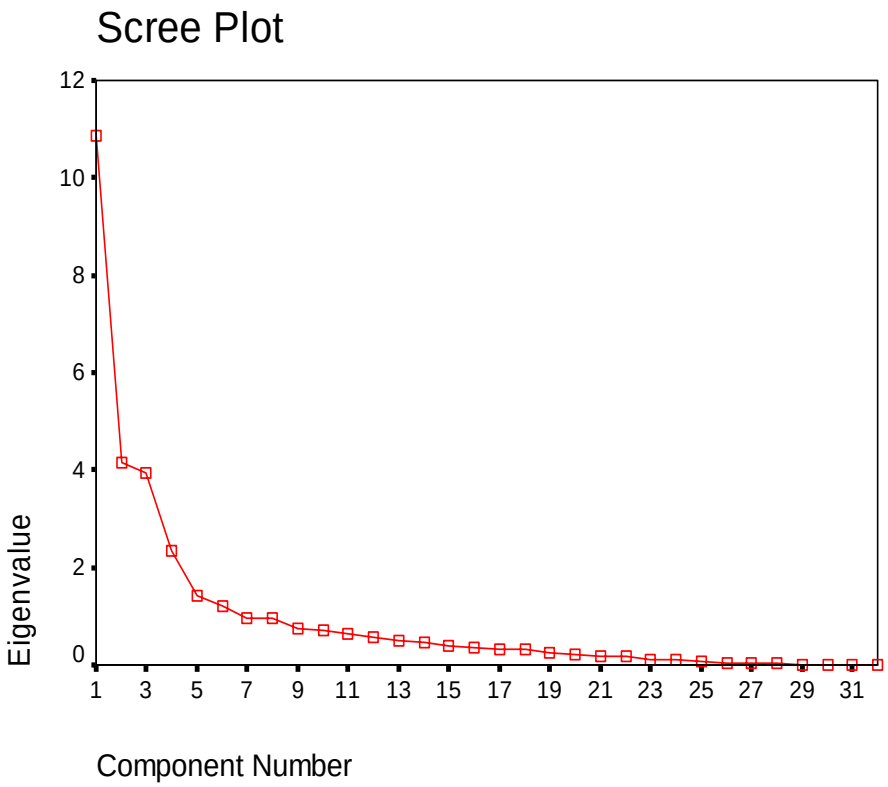


TABLE 41: ROTATED COMPONENT MATRIC [SECTION 2B]

	Component					
	1	2	3	4	5	6
Q1SK	.097	.736	.094	-.085	.022	.104
Q2SK	.283	.843	.119	.039	.228	.231
Q3SK	.097	.599	.071	-.110	.028	.333
Q4SK	-.005	.864	.066	.187	.333	-.003
Q5SK	.015	.496	-.009	.211	.207	-.219
Q6SK	-.088	.724	-.052	.149	.314	-.026
Q7SK	.278	.794	-.120	.225	.117	.185
Q8SR	.183	.157	.303	.143	.144	.675
Q9SR	.208	.127	.136	.157	.162	.682
Q10SR	.288	.203	.394	.145	.273	.644
Q11L	.837	.189	.355	.071	.068	.219
Q12L	.476	-.061	.381	.459	.010	-.013
Q13L	.875	.171	.096	-.129	.051	.129
Q14L	.508	-.107	.296	.402	.032	.271
Q15L	.632	-.113	.111	.122	.258	.018
Q16L	.557	.413	.515	-.166	.064	.128
Q17L	.917	.184	.149	-.010	.071	.143
Q18L	.817	.231	.276	-.060	.083	.192
Q19M	.299	-.222	.859	.064	.144	.168
Q20M	.207	.355	.735	.064	.306	.333
Q21M	.219	.180	.770	-.307	.248	-.086
Q22M	.299	-.222	.859	.064	.144	.168
Q23M	.207	.355	.735	.064	.306	.333
Q24C	.200	.022	-.149	.415	.005	.332
Q25C	-.002	.099	.017	.927	-.051	.120
Q26C	.090	.132	.006	.763	.015	-.111
Q27C	-.092	.115	.021	.819	-.183	.033
Q28C	-.088	.015	-.048	.761	-.041	.247
Q29N	.109	.274	.205	-.123	.859	.123
Q30N	.137	.275	.187	-.103	.890	.121
Q31N	.040	.129	.185	-.015	.846	.124
Q32N	.203	.304	.159	-.109	.736	.104

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a Rotation converged in 8 iterations.

TABLE 42: SECTION 2B [STAFF KNOWLEDGE EMPOWERMENT AND MOTIVATION]

Alpha = 0.8642
N (cases) = 130
N(Items) = 7

TABLE 43: DESCRIPTIVE STATISTICS - SECTION 2B [STAFF KNOWLEDGE EMPOWERMENT AND MOTIVATION]

	Mean	Std. Deviation	Analysis N
Q1SK	2.22	.760	130
Q2SK	2.30	.784	130
Q3SK	2.12	.711	130
Q4SK	2.80	.402	130
Q5SK	2.80	.402	130
Q6SK	2.80	.402	130
Q7SK	2.70	.460	130

TABLE 44: TOTAL VARIANCE EXPLAINED - SECTION 2B [STAFF KNOWLEDGE EMPOWERMENT AND MOTIVATION]

	Initial Eigen values			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.235	60.503	60.503	4.235	60.503	60.503
2	.846	12.084	72.588			
3	.660	9.424	82.012			
4	.543	7.750	89.763			
5	.395	5.647	95.410			
6	.207	2.956	98.365			
7	.114	1.635	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 10 : SCREE PLOT - SECTION 2B [STAFF KNOWLEDGE EMPOWERMENT AND MOTIVATION]

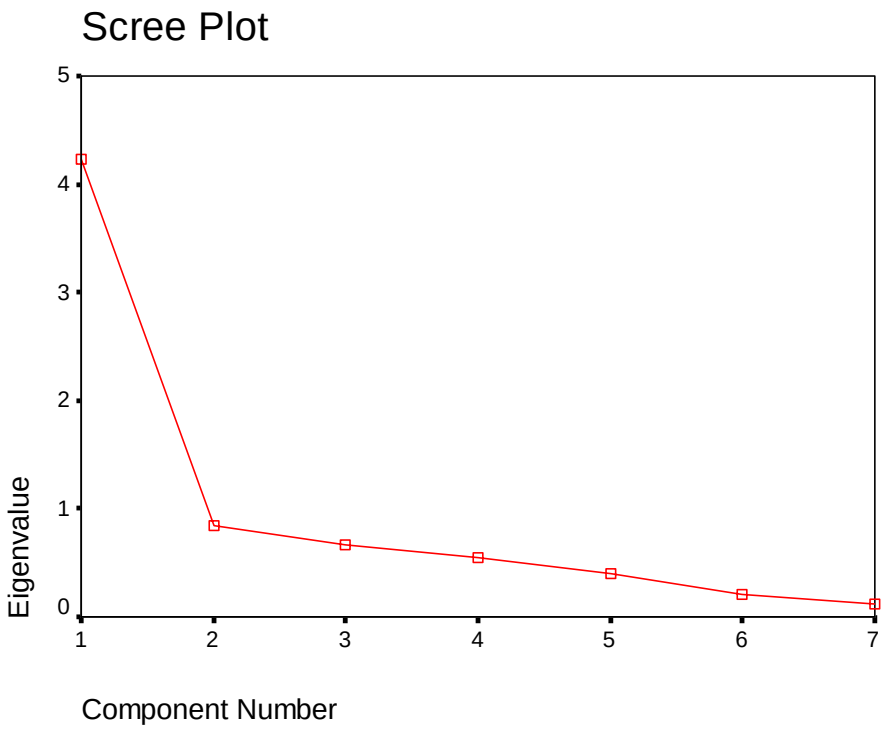


TABLE 45: COMPONENT MATRIX - SECTION 2B [STAFF KNOWLEDGE EMPOWERMENT AND MOTIVATION]

	Component
	1
Q1SK	.727
Q2SK	.927
Q3SK	.638
Q4SK	.909
Q5SK	.529
Q6SK	.767
Q7SK	.863

Extraction Method: Principal Component Analysis.
a 1 components extracted.

TABLE 46: SECTION 2B [STAFF REWARD]

Alpha = 0.8066
N (cases) = 130
N(Items) = 3

TABLE 47: DESCRIPTIVE STATISTICS –SECTION 2B [STAFF REWARD]

	Mean	Std. Deviation	Analysis N
Q8SR	2.30	.460	130
Q9SR	2.28	.449	130
Q10SR	2.31	.463	130

TABLE 48: TOTAL VARIANCE EXPLAINED–SECTION 2B [STAFF REWARD]

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.166	72.211	72.211	2.166	72.211	72.211
2	.553	18.423	90.634			
3	.281	9.366	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 11: SCREE PLOT - SECTION 2B [STAFF REWARD]

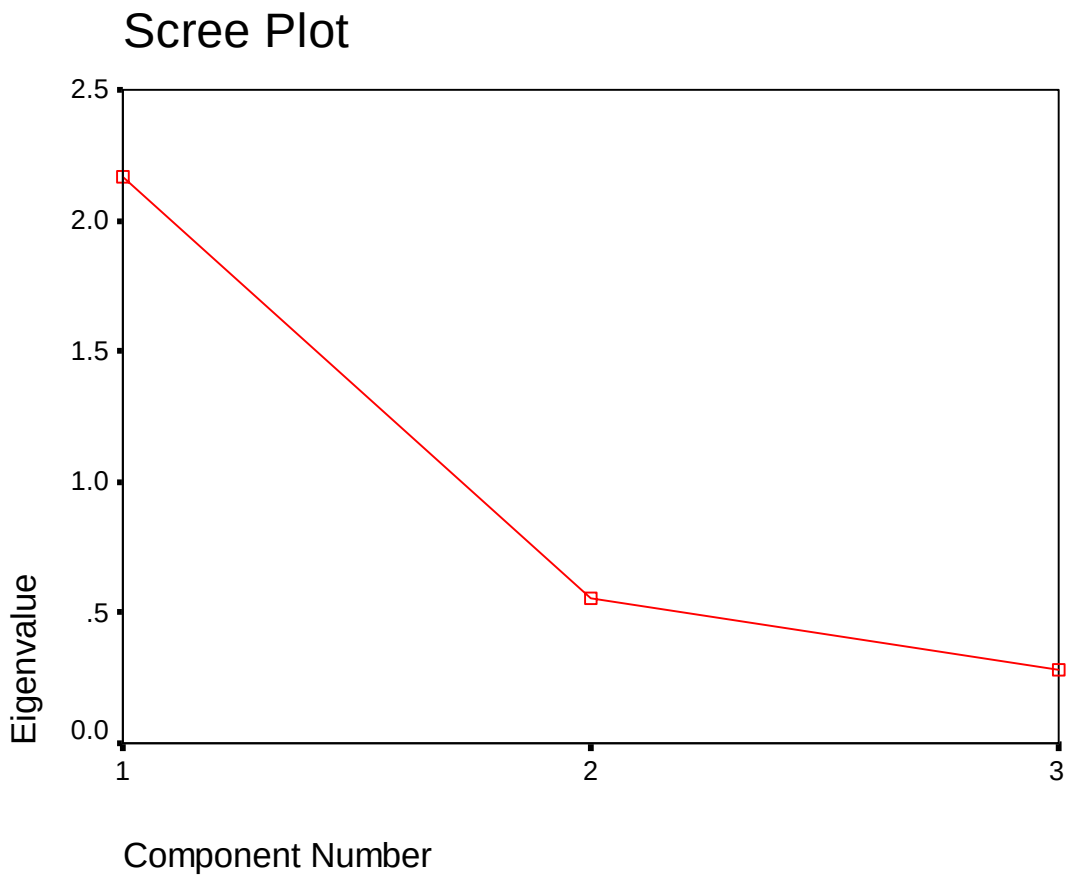


TABLE 49: COMPONENT MATRIX- SECTION 2B [STAFF REWARD]

	Component
	1
Q8SR	.847
Q9SR	.793
Q10SR	.905

Extraction Method: Principal Component Analysis.
a 1 components extracted.

TABLE 50: SECTION 2B [LEADERSHIP-GENERAL]

Alpha = 0.9248
N (cases) = 130
N(Items) = 6

TABLE 51: DESCRIPTIVE STATISTICS- SECTION 2B [LEADERSHIP-GENERAL]

	Mean	Std. Deviation	Analysis N
Q11L	1.83	.612	130
Q13L	1.88	.659	130
Q15L	1.86	.644	130
Q16L	2.11	.696	130
Q17L	1.86	.644	130
Q18L	1.83	.612	130

TABLE 52: TOTAL VARIANCE EXPLAINED

	Initial Eigen values			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.472	74.532	74.532	4.472	74.532	74.532
2	.788	13.136	87.668			
3	.382	6.366	94.034			
4	.174	2.892	96.926			
5	.107	1.784	98.710			
6	.077	1.290	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 12: SCREE PLOT - SECTION 2B [LEADERSHIP-GENERAL]

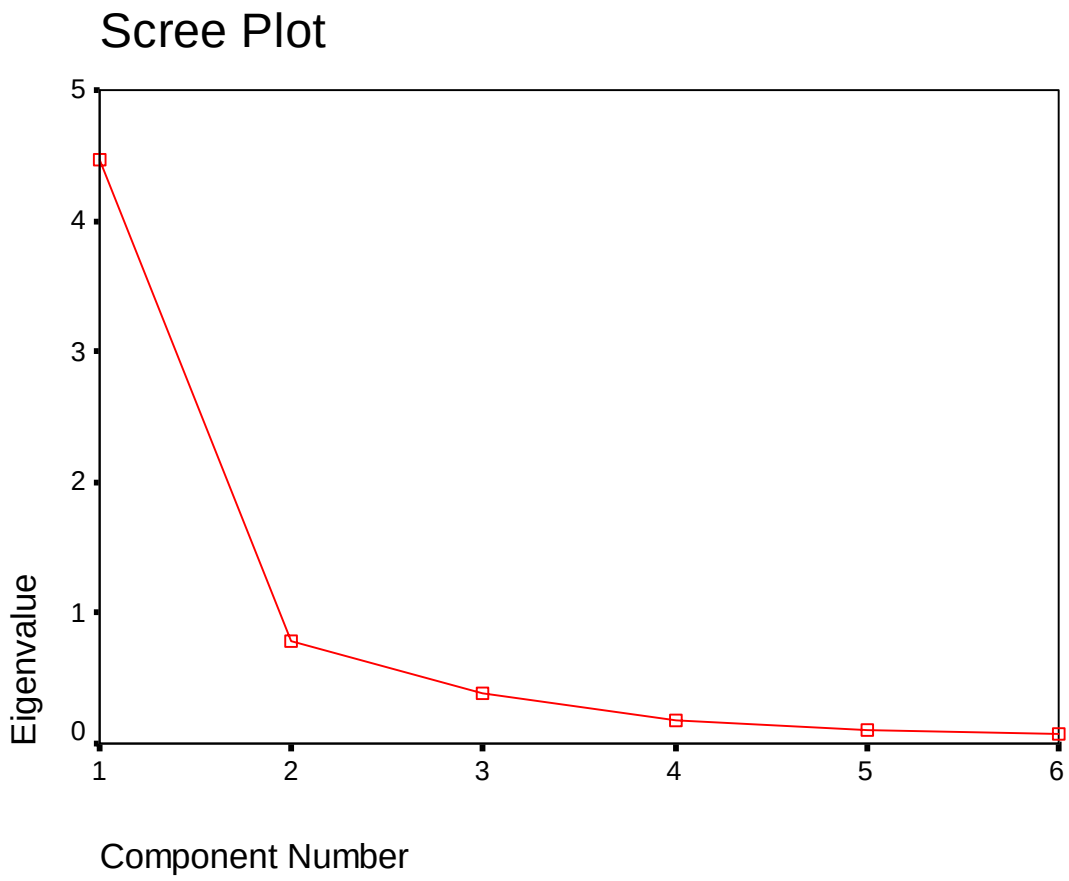


TABLE 53: COMPONENT MATRIX- SECTION 2B [LEADERSHIP-GENERAL]

	Component
	1
Q11L	.951
Q13L	.897
Q15L	.601
Q16L	.794
Q17L	.951
Q18L	.930

Extraction Method: Principal Component Analysis.
a 1 components extracted.

TABLE 54: SECTION 2B [LEADERSHIP-TURBULENCE]

Alpha = 0.7711
N (cases) = 130
N(Items) = 2

TABLE 55: DESCRIPTIVE STATISTICS- SECTION 2B [LEADERSHIP-TURBULENCE]

	Mean	Std. Deviation	Analysis N
Q12L	1.84	.607	130
Q14L	1.82	.616	130

TABLE 56: TOTAL VARIANCE EXPLAINED- SECTION 2B [LEADERSHIP-TURBULENCE]

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.627	81.373	81.373	1.627	81.373	81.373
2	.373	18.627	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 13: SCREE PLOT - SECTION 2B [LEADERSHIP-TURBULENCE]

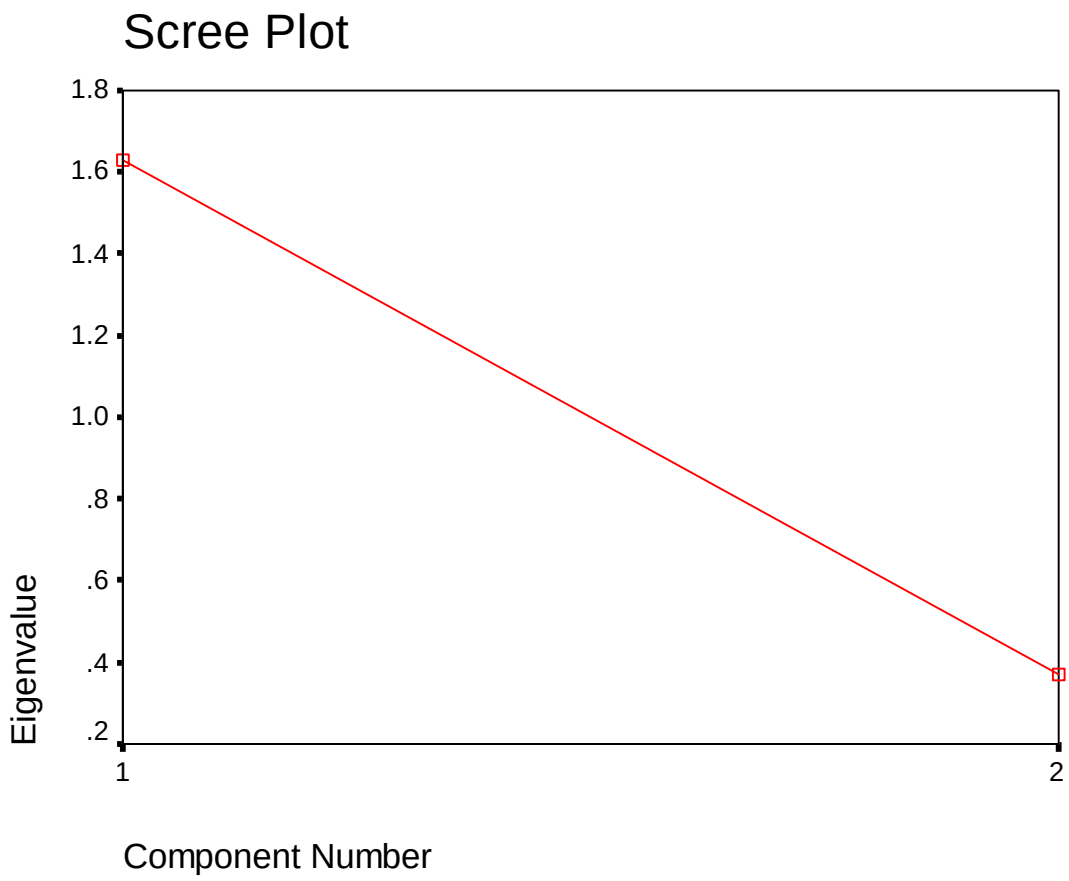


TABLE 57: COMPONENT MATRIX - SECTION 2B [LEADERSHIP-TURBULENCE]

	Component
	1
Q12L	.902
Q14L	.902

Extraction Method: Principal Component Analysis.
a 1 components extracted.

TABLE 58: SECTION 2B [MEASUREMENT]

Alpha = 0.9343
N (cases) = 130
N(Items) = 5

TABLE 59: DESCRIPTIVE STATISTICS- SECTION 2B [MEASUREMENT]

	Mean	Std. Deviation	Analysis N
Q19M	1.91	.549	130
Q20M	1.83	.759	130
Q21M	2.41	.679	130
Q22M	1.91	.549	130
Q23M	1.83	.759	130

TABLE 60: TOTAL VARIANCE EXPLAINED- SECTION 2B [MEASUREMENT]

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.021	80.415	80.415	4.021	80.415	80.415
2	.657	13.132	93.546			
3	.323	6.454	100.000			
4	-1.089E-16	-2.178E-15	100.000			
5	-5.223E-16	-1.045E-14	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 14 : SCREE PLOT- SECTION 2B [MEASUREMENT]

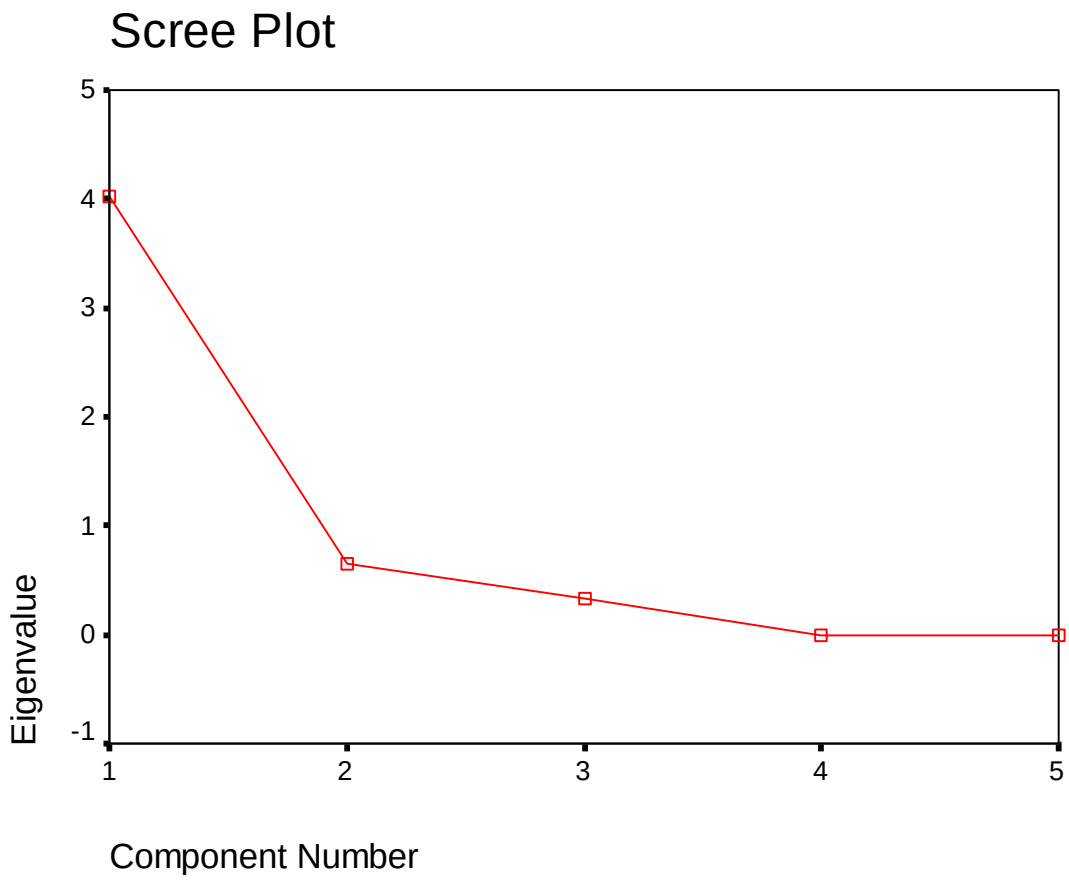


TABLE 61: COMPONENT MATRIX- SECTION 2B [MEASUREMENT]

	Component
	1
Q19M	.896
Q20M	.924
Q21M	.841
Q22M	.896
Q23M	.924

Extraction Method: Principal Component Analysis.
a 1 components extracted.

TABLE 62 : SECTION 2B [CUSTOMERS]

Alpha = 0.8323
N (cases) = 130
N (Items) = 5

TABLE 63: DESCRIPTIVE STATISTICS- SECTION 2B [CUSTOMERS]

	Mean	Std. Deviation	Analysis N
Q24C	2.21	.407	130
Q25C	2.20	.402	130
Q26C	2.20	.402	130
Q27C	2.20	.402	130
Q28C	2.20	.402	130

TABLE 64: TOTAL VARIANCE EXPLAINED- SECTION 2B [CUSTOMERS]

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.069	61.385	61.385	3.069	61.385	61.385
2	.837	16.744	78.129			
3	.565	11.294	89.423			
4	.392	7.837	97.260			
5	.137	2.740	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 15: SCREE PLOT - SECTION 2B [CUSTOMERS]

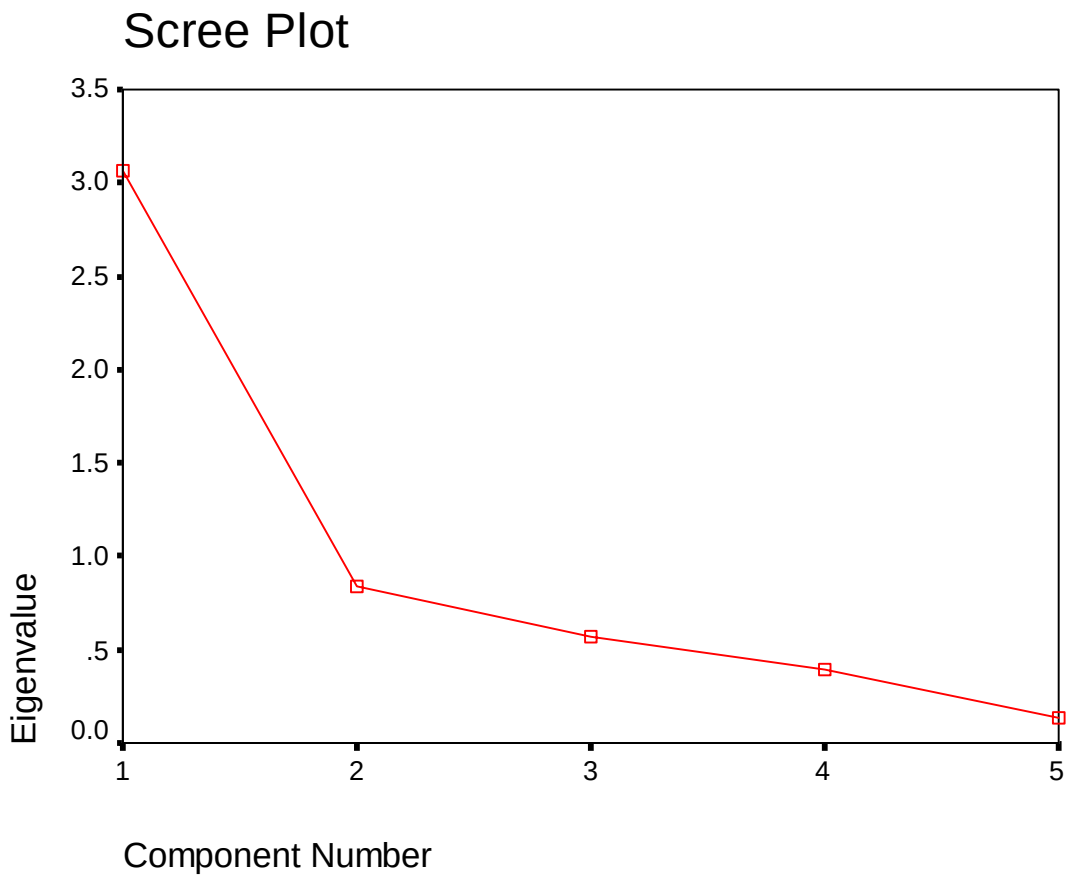


TABLE 65: COMPONENT MATRIX - SECTION 2B [CUSTOMERS]

	Component
	1
Q24C	.526
Q25C	.937
Q26C	.744
Q27C	.841
Q28C	.809

Extraction Method: Principal Component Analysis.
a 1 components extracted.

TABLE 66 : SECTION 2B [NETWORKS AND SUPPORT SYSTEMS]

Alpha = 0.9379
N (cases) = 130
N (Items) = 4

TABLE 67: DESCRIPTIVE STATISTICS- SECTION 2B [NETWORKS AND SUPPORT SYSTEMS]

	Mean	Std. Deviation	Analysis N
Q29N	2.58	.526	130
Q30N	2.58	.511	130
Q31N	2.58	.511	130
Q32N	2.58	.511	130

TABLE 68: TOTAL VARIANCE EXPLAINED- SECTION 2B [NETWORKS AND SUPPORT SYSTEMS]

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.380	84.496	84.496	3.380	84.496	84.496
2	.359	8.971	93.468			
3	.240	6.004	99.472			
4	.021	.528	100.000			

Extraction Method: Principal Component Analysis.

GRAPH 16: SCREE PLOT - SECTION 2B [NETWORKS AND SUPPORT SYSTEMS]

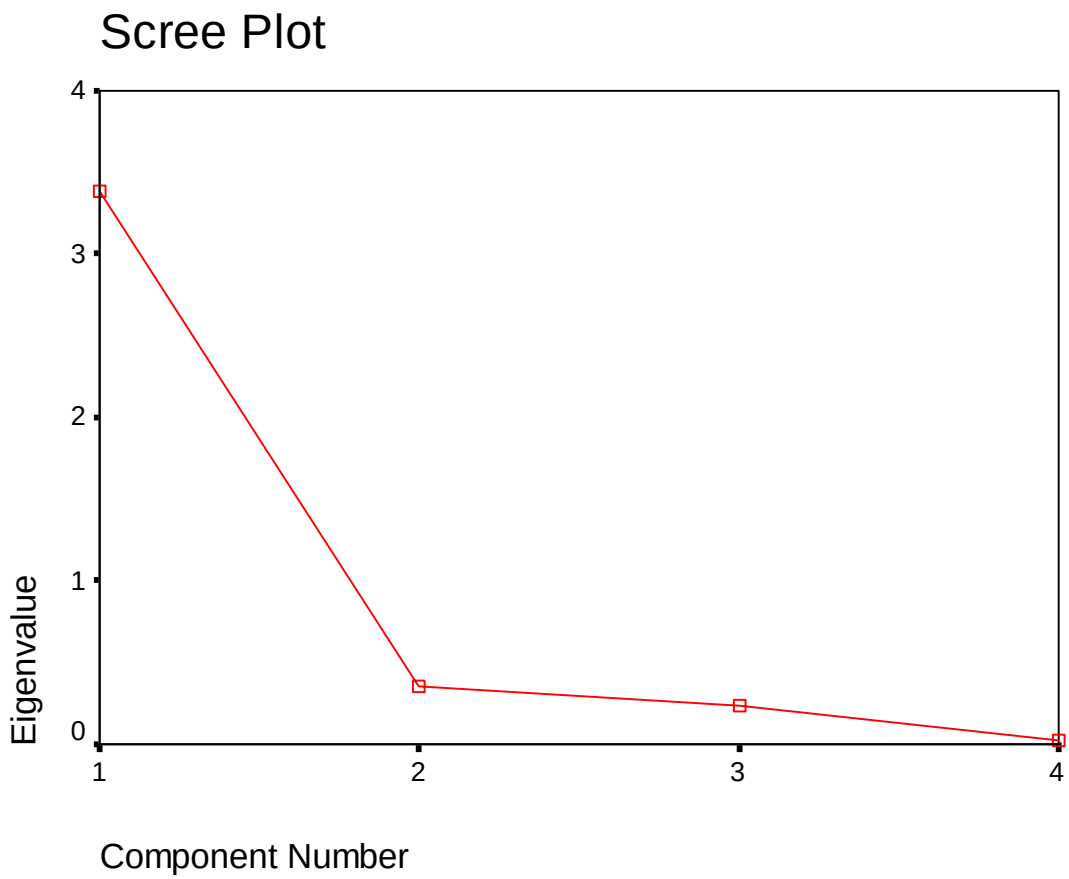


TABLE 69: COMPONENT MATRIX- SECTION 2B [NETWORKS AND SUPPORT SYSTEMS]

	Component
	1
Q29N	.952
Q30N	.979
Q31N	.879
Q32N	.861

Extraction Method: Principal Component Analysis.
a 1 components extracted.

ANNEXURE 14

TABLE 70: ALL PROCESS CLUSTERS [IMPORTANCE]

PROCESS CLUSTER	MEAN
M	2.84
SK	2.81
LT	2.80
LG	2.78
C	2.64
N	2.45
SR	2.30

TABLE 71: MEAN AND STANDARD DEVIATION OF RESPONSES FOR EACH PROCESS

[IMPORTANCE]

Descriptive Statistics

	N	Mean	Std. Deviation
Q2.22A	130	3.00	.000
Q2.21A	130	3.00	.000
Q2.18A	130	3.00	.000
Q2.12A	130	3.00	.000
Q2.17A	130	2.90	.301
Q2.20A	130	2.90	.301
Q2.15A	130	2.90	.301
Q2.5A	130	2.90	.301
Q2.1A	130	2.90	.301
Q2.28A	130	2.90	.301
Q2.4A	130	2.80	.402
Q2.7A	130	2.80	.402
Q2.6A	130	2.80	.402
Q2.2A	130	2.80	.402
Q2.16A	130	2.70	.460
Q2.24A	130	2.70	.460
Q2.23A	130	2.70	.460
Q2.3A	130	2.70	.643
Q2.29A	130	2.70	.643
Q2.26A	130	2.60	.492
Q2.13A	130	2.60	.492
Q2.27A	130	2.60	.666
Q2.19A	130	2.60	.666
Q2.11A	130	2.60	.492
Q2.14A	130	2.60	.492
Q2.30A	130	2.60	.492
Q2.9A	130	2.40	.492
Q2.25A	130	2.40	.666
Q2.8A	130	2.30	.460
Q2.31A	130	2.30	.784
Q2.32A	130	2.20	.751
Q2.10A	130	2.20	.751
Valid N (listwise)	130		

ANNEXURE 15

TABLE 72: ALL PROCESS CLUSTERS [IMPLEMENTATION]

PROCESS CLUSTER	MEAN
N	2.58
SK	2.53
SR	2.29
C	2.20
M	1.97
LG	1.89
LT	1.83

TABLE 73: MEAN AND STANDARD DEVIATION OF RESPONSES FOR EACH PROCESS

[IMPLEMENTATION]

Descriptive Statistics

	N	Mean	Std. Deviation
Q6SK	130	2.80	.402
Q5SK	130	2.80	.402
Q4SK	130	2.80	.402
Q7SK	130	2.70	.460
Q30N	130	2.58	.511
Q29N	130	2.58	.526
Q32N	130	2.58	.511
Q31N	130	2.58	.511
Q21M	130	2.41	.679
Q10SR	130	2.31	.463
Q8SR	130	2.30	.460
Q2SK	130	2.30	.784
Q9SR	130	2.28	.449
Q1SK	130	2.22	.760
Q24C	130	2.21	.407
Q28C	130	2.20	.402
Q27C	130	2.20	.402
Q25C	130	2.20	.402
Q26C	130	2.20	.402
Q3SK	130	2.12	.711
Q16L	130	2.11	.696
Q22M	130	1.91	.549
Q19M	130	1.91	.549
Q13L	130	1.88	.659
Q17L	130	1.86	.644
Q15L	130	1.86	.644
Q12L	130	1.84	.607
Q11L	130	1.83	.612
Q23M	130	1.83	.759
Q20M	130	1.83	.759
Q18L	130	1.83	.612
Q14L	130	1.82	.616
Valid N (listwise)	130		

ANNEXURE 16

TABLE 74: THE IMPORTANCE OF PROCESS CLUSTERS

SK	2.81
SR	2.3
LG	2.78
LT	2.8
M	2.84
C	2.64
N	2.45

GRAPH 17: THE IMPORTANCE OF PROCESS CLUSTERS

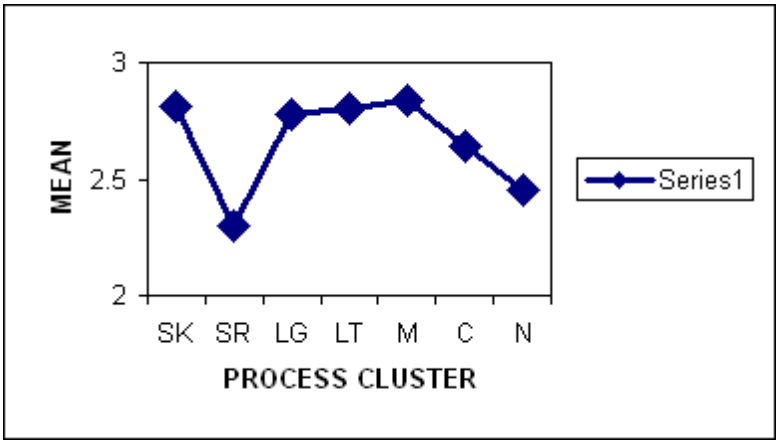


TABLE 75: THE IMPLEMENTATION OF PROCESS CLUSTERS

SK	2.53
SR	2.29
LG	1.89
LT	1.83
M	1.97
C	2.2
N	2.58

GRAPH 18: THE IMPLEMENTATION OF PROCESS CLUSTERS

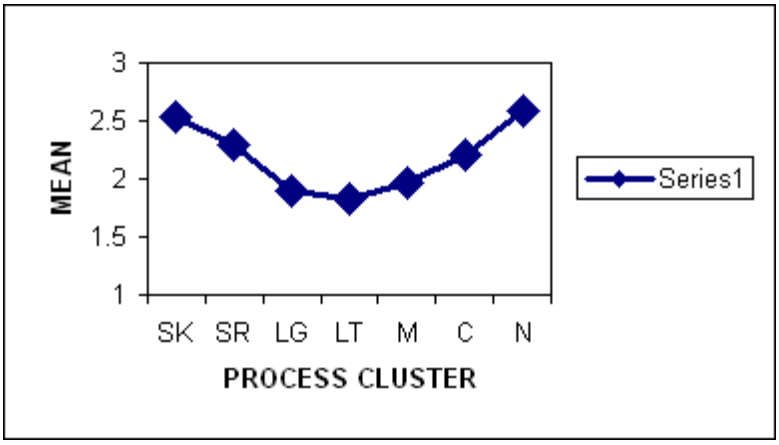


TABLE 76 : THE IMPORTANCE OF ALL PROCESSES

PROCESS	MEAN
1	2.9
2	2.8
3	2.7
4	2.8
5	2.9
6	2.8
7	2.8
8	2.3
9	2.4
10	2.2
11	2.6
12	3
13	2.6
14	2.6
15	2.9
16	2.7
17	2.9
18	3
19	2.6
20	2.9
21	3
22	3
23	2.7
24	2.7
25	2.4
26	2.6
27	2.6
28	2.9
29	2.7
30	2.6
31	2.3
32	2.2

GRAPH 19: THE IMPORTANCE OF ALL PROCESSES

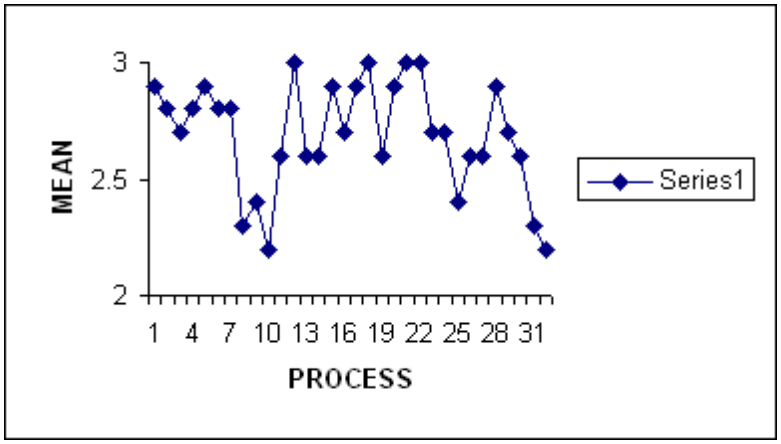
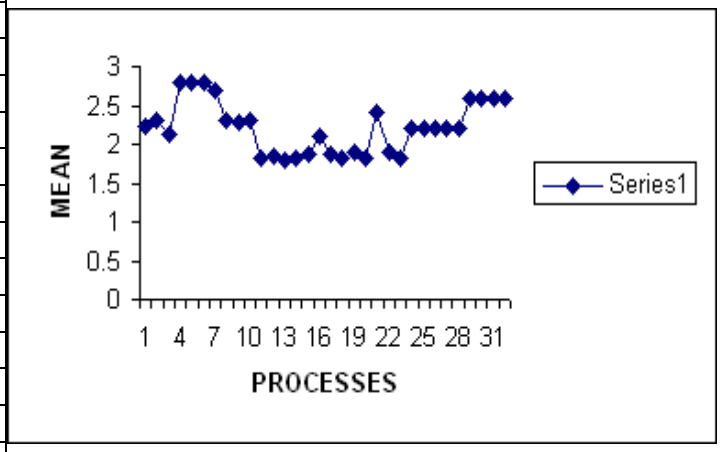


TABLE 77: THE IMPLEMENTATION OF ALL PROCESSES

PROCESS	MEAN
1	2.22
2	2.3
3	2.12
4	2.8
5	2.8
6	2.8
7	2.7
8	2.3
9	2.28
10	2.31
11	1.83
12	1.84
13	1.8
14	1.82
15	1.86
16	2.11
17	1.86
18	1.83
19	1.91
20	1.83
21	2.41
22	1.91
23	1.83
24	2.21
25	2.2
26	2.2
27	2.2
28	2.2
29	2.58
30	2.58
31	2.58
32	2.58

GRAPH 20: THE IMPLEMENTATION OF ALL PROCESSES



ANNEXURE 17

TABLE 78: PAIRED SAMPLES TEST [IMPORTANCE VS IMPLEMENTATION]

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	IMPORTAN - IMPLEMEN	.4757	.44624	.16866	.0630	.8884	2.821	6	.030

TABLE 79 : One-Sample Kolmogorov-Smirnov Test [IMPORTANCE VS IMPLEMENTATION]

		IMPORTAN	IMPLEMEN
N [process clusters]		7	7
Normal Parameters(a,b)	Mean	2.6600	2.1843
	Std. Deviation	.20936	.30154
Most Extreme Differences	Absolute	.288	.190
	Positive	.195	.190
	Negative	-.288	-.160
Kolmogorov-Smirnov Z		.762	.502
Asymp. Sig. (2-tailed)		.606	.962

a Test distribution is Normal.
b Calculated from data.

ANNEXURE 18

TABLE 80: PAIRED SAMPLES TEST [PROCESS CLUSTERS]

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	SKA - SKB	1.9615	3.68825	.32348	1.3215	2.6016	6.064	129	.000
Pair 2	SRA - SRB	.0154	1.04906	.09201	-.1667	.1974	.167	129	.867
Pair 3	LGA - LGB	5.3308	3.83858	.33667	4.6647	5.9969	15.834	129	.000
Pair 4	LTA - LTB	1.9385	1.09795	.09630	1.7479	2.1290	20.130	129	.000
Pair 5	MA - MB	4.3154	2.84492	.24952	3.8217	4.8091	17.295	129	.000
Pair 6	CA - CB	2.1923	2.08388	.18277	1.8307	2.5539	11.995	129	.000
Pair 7	NA - NB	-.5077	2.61850	.22966	-.9621	-.0533	-2.211	129	.029

TABLE 81: KOLMOGOROV-SMIRNOV TEST

One-Sample Kolmogorov-Smirnov Test

		SKA	SRA	LGA	LTA	MA	CA	NA	SKB	SRB	LGB	LTB	MB	CB	NB
N		130	130	130	130	130	130	130	130	130	130	130	130	130	130
Normal Parameters[a,b]	Mean	19.7000	6.9000	16.7000	5.6000	14.2000	13.2000	9.8000	17.7385	6.8846	11.3692	3.6615	9.8846	11.0077	10.3077
	Std. Deviation	1.42323	1.30503	1.27377	.49179	.98359	2.09614	2.28035	3.03865	1.16562	3.29937	1.10358	2.96134	1.55766	1.89183
Most Extreme Differences	Absolute	.283	.255	.246	.392	.392	.305	.233	.204	.353	.237	.264	.154	.326	.299
	Positive	.184	.255	.209	.289	.289	.195	.167	.142	.353	.131	.264	.138	.326	.204
	Negative	-.283	-.146	-.246	-.392	-.392	-.305	-.233	-.204	-.224	-.237	-.197	-.154	-.259	-.299
Kolmogorov-Smirnov Z		3.232	2.905	2.808	4.469	4.469	3.475	2.653	2.321	4.025	2.706	3.012	1.761	3.714	3.410
Asymp. Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004	.000	.000

a. Test distribution is Normal.

b. Calculated from data.

TABLE 82: MEAN, AGGREGATED RESPONSES OF PROCESS CLUSTERS

PROCESS CLUSTER	IMPORTANCE	IMPLEMENTATION
STAFF-KNOWLEDGE, MOTIVATION AND REWARD **[SK]**	2.81	2.53
STAFF-REWARD **[SR]**	2.30	2.29
LEADERSHIP-GENERAL **[LG]**	2.78	1.89
LEADERSHIP-TURBULENCE **[LT]**	2.80	1.83
MEASUREMENT **[M]**	2.84	1.97
CUSTOMERS [C]	2.64	2.20
NETWORKS AND SUPPORT SYSTEMS **[N]**	2.45	2.58

ANNEXURE 19
TABLE 83: PAIRED SAMPLES TEST [ALL PROCESSES]

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Q2.1A - Q2.1B	.68	.874	.077	.53	.83	8.836	129	.000
Pair 2	Q2.2A - Q2.2B	.50	.926	.081	.34	.66	6.160	129	.000
Pair 3	Q2.3A - Q2.3B	.58	.947	.083	.42	.75	7.042	129	.000
Pair 4	Q2.4A - Q2.4B	.00	.635	.056	-.11	.11	.000	129	1.000
Pair 5	Q2.5A - Q2.5B	.10	.511	.045	.01	.19	2.231	129	.027
Pair 6	Q2.6A - Q2.6B	.00	.498	.044	-.09	.09	.000	129	1.000
Pair 7	Q2.7A - Q2.7B	.10	.703	.062	-.02	.22	1.623	129	.107
Pair 8	Q2.8A - Q2.8B	.00	.498	.044	-.09	.09	.000	129	1.000
Pair 9	Q2.9A - Q2.9B	.12	.449	.039	.05	.20	3.124	129	.002
Pair 10	Q2.10A - Q2.10B	-.11	.718	.063	-.23	.02	-1.710	129	.090
Pair 11	Q2.11A - Q2.11B	.77	.763	.067	.64	.90	11.497	129	.000
Pair 12	Q2.12A - Q2.12B	1.16	.607	.053	1.06	1.27	21.800	129	.000
Pair 13	Q2.13A - Q2.13B	.72	.957	.084	.56	.89	8.619	129	.000
Pair 14	Q2.14A - Q2.14B	.78	.674	.059	.66	.89	13.151	129	.000
Pair 15	Q2.15A - Q2.15B	1.04	.675	.059	.92	1.16	17.536	129	.000
Pair 16	Q2.16A - Q2.16B	.59	.912	.080	.43	.75	7.402	129	.000
Pair 17	Q2.17A - Q2.17B	1.04	.751	.066	.91	1.17	15.760	129	.000
Pair 18	Q2.18A - Q2.18B	1.17	.612	.054	1.06	1.28	21.792	129	.000
Pair 19	Q2.19A - Q2.19B	.69	.669	.059	.58	.81	11.803	129	.000
Pair 20	Q2.20A - Q2.20B	1.07	.846	.074	.92	1.22	14.406	129	.000
Pair 21	Q2.21A - Q2.21B	.59	.679	.060	.47	.71	9.953	129	.000
Pair 22	Q2.22A - Q2.22B	1.09	.549	.048	1.00	1.19	22.682	129	.000
Pair 23	Q2.23A - Q2.23B	.87	.839	.074	.72	1.01	11.814	129	.000
Pair 24	Q2.24A - Q2.24B	.49	.574	.050	.39	.59	9.780	129	.000
Pair 25	Q2.25A - Q2.25B	.20	.602	.053	.10	.30	3.786	129	.000
Pair 26	Q2.26A - Q2.26B	.40	.565	.050	.30	.50	8.070	129	.000
Pair 27	Q2.27A - Q2.27B	.40	.689	.060	.28	.52	6.621	129	.000
Pair 28	Q2.28A - Q2.28B	.70	.460	.040	.62	.78	17.349	129	.000
Pair 29	Q2.29A - Q2.29B	.12	.737	.065	.00	.25	1.905	129	.059
Pair 30	Q2.30A - Q2.30B	.02	.762	.067	-.11	.16	.345	129	.730
Pair 31	Q2.31A - Q2.31B	-.28	.872	.076	-.43	-.13	-3.622	129	.000
Pair 32	Q2.32A - Q2.32B	-.38	.760	.067	-.51	-.25	-5.654	129	.000

ANNEXURE 20: REFERENCES

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